



CITY OF DURBAN

Annual Report

OF

CITY MEDICAL OFFICER OF HEALTH

YEAR ENDING 30th JUNE, 1942

HAYNE & GIBSON (PTY) LTD.,
DURBAN
1943



PUBLIC HEALTH DEPARTMENT

1st August, 1942.

TO HIS WORSHIP THE MAYOR AND
CITY COUNCILLORS OF THE CITY OF DURBAN.

MR. MAYOR, LADIES AND GENTLEMEN,

I have the honour to present the Forty-First Annual Report of the activities of the City Health Department during the year ended 30th June, 1942.

CLIMATIC DATA. Latitude: 30 degrees. Longitude: 31 degrees.

Temperature: (Statistics kindly supplied by the City Engineer):—

1941.	Temperature Average. 9 a.m.	Humidity Maximum. 9 a.m.	Rainfall.
July	58	74	0.74
August	55.4	71	0.40
September	66.4	76	4.22
October	64	58	1.88
November	63.7	79	3.79
December	67.7	74	1.57
1942.			
January	65.7	81	4.61
February	82	80	3.51
March	66.1	83	6.81
April	68	82	2.18
May	59.9	75	4.75
June	56	72	0.64

AREA OF MUNICIPALITY: The area of Durban and Suburbs inclusive of Townlands is 43,050 acres (67.26 sq. miles). The City is built on ground rising from sea level, being backed by hills running north and south, the soil of the valleys being very fertile.

ANNUAL RATEABLE VALUES:

Gross value of land	£20,772,140
Gross value of buildings	31,668,560
Total:	£52,440,700

For the year under review, the rates imposed were 7d. on land and 3½d. on buildings (including water rate).

REPORT "A."

1. VITAL STATISTICS:

POPULATION:

	Census May, 1936.	Estimated at 30th June, 1942.
European	88,065	105,742
Coloured	7,336	8,469
Natives	63,762	74,132
Asiatics	80,384	92,183
	239,547	280,526

The principal Vital Statistics for the year, corrected for outward transfer are:

	European	Coloured	Native	Asiatic	Total
Population Estimate (30.6.42)	105,742	8,469	74,132	92,183	280,526
Birth Rates—corrected for outward transfer	19.01	47.1	18.3	44.1	27.8
Death Rates—corrected for outward transfer	9.3	22.9	26.4	18.3	17.2
Infantile Mortality Rate 1,000 live births	44.03	115.28	483.82	98.74	152.2
Percentage of illegitimate to live births	4.0	30.3	50.9	1.4	12.1
Death Rates all forms Tuberculosis per 1,000 of population	.34	4.1	3.31	2.1	1.7

BIRTHS: The following births were registered in Durban during the year (figures for previous year in brackets):

	European	Coloured	Native	Asiatic	Total
Local Births	2,021 (1,933)	399 (387)	1,360 (1,104)	4,071 (4,020)	7,851 (7,444)
Local illegitimate births	81 (66)	121 (116)	693 (589)	57 (34)	952 (805)
Still births	70 (60)	21 (21)	210 (121)	228 (151)	539 (353)

BIRTH RATES :

European	Coloured	Native	Asiatic
19.01 (20.7)	47.1 (46.8)	18.3 (15.4)*	44.1 (44.8)

*This figure is inaccurate and unreliable owing to incomplete registration of births.

Rates of natural increase, being the excess of births over deaths in proportion to population are as follows :

European	9.7 (10.1) per 1,000
Coloured	24.2 (26.7) " "
Asiatic	25.7 (29.8) " "

Illegitimacy accounted for 4.0 per cent. of the total European births, 30.3 for Coloureds, 50.9 for Natives and 1.4 for Asiatics.

DEATHS: (Figures for 1940-41 in brackets).

	European	Coloured	Native	Asiatic	Total
Local deaths all ages	988 (1,022)	194 (196)	1,961 (1,730)	1,694 (1,934)	4,837 (4,882)
Non-local residents	271 (212)	58 (20)	1,132 (1,082)	160 (84)	1,601 (1,398)

DEATH RATES :

European	Coloured	Native	Asiatic
10.4 (10.9)	22.9 (23.7)	26.4 (24.2)	18.3 (21.5)

INFANTILE MORTALITY :

	European	Coloured	Native	Asiatic	Total
Local deaths	89 (98)	46 (51)	658 (518)	402 (461)	1,195 (1,128)
Death of infants whose mothers came to Durban for confinement or were brought in suffering from illness which caused death ...	15 (19)	— (7)	301 (248)	31 (19)	347 (293)

Europeans: The infantile mortality rate per 1,000 for the year is 44.03 as compared with 50.69 in the previous year.

Causes of death were as follows :

	European	Coloured	Native	Asiatic	Total
Congenital Causes	15	4	84	62	165
Prematurity	20	15	82	49	166
Diarrhoea etc.	15	12	255	91	373
Bronchitis & Pneumonia	9	6	138	123	276
Others	30	9	99	77	215
	89	46	658	402	1,195

	European	Coloured	Native	Asiatic	Total
Births, Male	1,038 (989)	209 (187)	712 (540)	2,066 (2052)	4,025 (3,768)
„ Female	983 (944)	190 (200)	648 (564)	2,005 (1,968)	3,826 (3,676)

Infantile Deaths :

Male	55 (52)	29 (21)	358 (256)	222 (223)	664 (552)
Female	34 (46)	17 (30)	300 (262)	180 (238)	531 (576)

Still Births :

Local	70 (60)	21 (21)	210 (121)	238 (151)	539 (353)
Imported	5 (8)	3 (2)	182 (148)	17 (23)	207 (181)

Illegitimate Births :

Local	81 (66)	121 (116)	693 (589)	57 (34)	952 (805)
Imported	11 (5)	7 (5)	836 (712)	2 (3)	856 (725)

The following tables show the percentage of Deaths at various age periods for Europeans (Figures for 1940-41 in brackets):—

Age Period :	Number of Deaths.	Percentage of Total Deaths.
Under 1 year	89 (98)	8.9 (9.6)
1 — 2 years	26 (29)	2.7 (2.8)
2 — 5 years	12 (17)	1.2 (1.6)
1 — 5 years	127 (144)	12.8 (14.09)
5 —15 years	13 (16)	1.3 (1.5)
15 —25 years	21 (28)	2.1 (2.7)
25 —45 years	111 (96)	11.2 (9.4)
45 —65 years	319 (299)	32.2 (29.2)
65 years and over	397 (439)	40.1 (42.9)
Total	988 (1,022)	

DEATHS FROM CERTAIN MAIN CAUSES — EUROPEANS.

Disease :	Number of Deaths.	Percentage of Total Deaths.
Infective Intestinal Diseases (Enteric Fever, Dysentery, Diarrhoea and Enteritis)	42 (40)	4.02 (3.9)
Cancer	112 (118)	11.3 (11.5)
Heart and Circulatory System	246 (259)	24.8 (25.3)
Diseases of the Nervous System	87 (78)	8.8 (7.6)
Diseases of Birth and Early infancy	44 (44)	4.4 (4.3)
Pneumonia and Bronchitis	76 (88)	7.6 (8.6)
Pulmonary Tuberculosis	34 (41)	3.4 (4.01)
Other Tuberculosis	2 (—)	.202 (—)
Urinary and Genital Systems	79 (82)	7.8 (8.02)

MAIN CAUSES OF DEATH : CITY CASES ONLY.

(Figures for 1940-41 in brackets).

1. Cancer : Site of Disease—	E.	C.	N.	A.
Buccal Cavity and Pharynx	2 (10)	— (1)	— (—)	— (2)
Oesophagus	4 (—)	— (—)	— (—)	— (—)
Stomach and Duodenum	21 (—)	3 (—)	3 (—)	12 (—)
Rectum	5 (—)	— (—)	— (—)	2 (—)
Liver	5 (—)	— (—)	4 (—)	1 (—)
Pancreas	1 (—)	— (—)	— (—)	— (—)
Other Digestive Organs	10 (58)	— (1)	1 (8)	2 (22)
Larynx	2 (—)	— (—)	— (—)	— (—)
Lung	5 (7)	1 (—)	1 (2)	3 (1)
Uterus	1 (8)	3 (2)	1 (1)	1 (4)
Other Female Genital Organs	2 (2)	1 (—)	— (2)	— (—)
Breast	17 (7)	2 (—)	— (—)	1 (3)
Prostate	2 (—)	— (—)	— (—)	— (—)
Male and Female Urinary Organs	3 (7)	— (—)	1 (2)	— (—)
Other Organs	32 (19)	4 (1)	1 (3)	12 (7)
TOTAL	112 (118)	14 (5)	12 (18)	35 (39)
2. Diseases of the Heart	106 (137)	12 (8)	46 (82)	91 (168)
3. Bronchitis, Pneumonia	76 (88)	18 (34)	278 (132)	442 (558)
4. Influenza	2 (4)	— (—)	1 (4)	3 (4)
5. Typhoid	10 (2)	1 (—)	39 (23)	10 (6)
6. Appendicitis	5 (3)	— (2)	2 (—)	4 (5)
7. Tuberculosis	36 (41)	35 (36)	246 (262)	199 (231)
8. Diabetes	16 (16)	— (2)	— (—)	10 (15)
9. Apoplexy	31 (35)	2 (2)	18 (13)	28 (50)
10. Diseases of the Arteries	119 (120)	2 (5)	12 (9)	63 (26)
11. Diseases of the Kidneys—				
Nephritis	62 (69)	9 (9)	27 (53)	54 (79)
Other diseases of kidneys	4 (5)	— (3)	— (3)	5 (3)
12. Diseases of the Liver	14 (16)	2 (1)	25 (15)	13 (8)
13. Accidents of Parturition	1 (13)	— (2)	2 (19)	4 (8)
14. Old Age	28 (33)	1 (5)	8 (8)	22 (14)
15. Suicide—				
Poisoning	5 (7)	2 (—)	1 (1)	1 (6)
Hanging or strangulation	2 (1)	— (—)	3 (1)	3 (6)
Drowning	1 (—)	— (—)	— (—)	— (—)
Firearms	1 (—)	— (—)	— (—)	— (—)
Cutting or piercing instruments	— (2)	— (—)	— (—)	— (3)
16. Accidents—				
Railways	1 (1)	— (—)	6 (5)	— (—)
Trolley buses	1 (—)	1 (—)	— (—)	— (—)
Motor-driven vehicles	2 (17)	1 (3)	7 (23)	7 (14)
Motor-driven cycles	1 (1)	— (—)	— (—)	— (—)
Absorption of gases	— (—)	— (—)	2 (—)	1 (—)
Burns	2 (4)	— (—)	7 (6)	27 (24)
Injury by firearms	2 (1)	— (—)	1 (—)	— (—)
Cutting or piercing instruments	— (—)	— (—)	— (1)	— (—)
Fall	12 (11)	1 (1)	4 (12)	2 (3)
Drowning	3 (5)	— (—)	5 (4)	— (11)
Other	1 (—)	— (—)	1 (—)	3 (—)

CAUSES OF DEATH — 1941-1942.

Code.	Disease.	Borough				Imported			
		E	C	N	A	E	C	N	A
	Infectious and Parasitic Diseases—								
001	Typhoid Fever	10	1	39	10	7	—	31	8
007	Undulant Fever	—	—	1	—	—	—	1	—
008	Cerebro spinal meningitis	1	—	—	—	—	—	—	—
010	Scarlet fever	1	—	—	—	—	—	—	—
011	Whooping Cough	1	—	2	1	—	—	—	—
012	Diphtheria	2	1	4	—	1	—	3	1
013	Erysipelas	—	—	—	—	—	—	—	—
014	Tetanus	—	1	7	1	—	—	3	—
015	T.B. of Respiratory System	34	33	225	182	27	18	263	38

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Code.	Disease.	Borough				Imported			
		E	C	N	A	E	C	N	A
016	Central nervous system	—	—	—	—	1	—	—	—
017	T.B. Intestines and peritoneum	—	—	2	6	—	1	3	1
018	T.B. (Vertebral Column)	—	—	1	1	—	—	3	—
023	T.B. other organs	1	2	7	6	2	—	9	—
024	T.B. Miliary	1	—	11	4	1	—	23	1
027	Purulent infection and septicaemia	1	—	3	2	—	—	—	—
032	Dysentery : bacillary	10	1	53	15	2	—	35	—
033	do. : amoebic	2	5	174	14	—	—	68	3
035	do. : other	—	1	6	4	—	—	1	—
036	Malaria	1	2	—	—	6	—	—	—
040	Locomotion Atoxia	1	—	—	—	—	—	—	—
042	Aneurysm of the aorta	6	1	11	—	—	1	2	—
043	Congenital Syphilis	—	2	24	5	—	—	27	1
044	Other forms	2	—	10	1	—	—	9	—
049	Influenza	2	—	1	3	—	—	—	—
052	Measles	—	—	—	1	—	—	—	—
053	Acute Poliomyelitis	1	—	—	—	—	—	—	—
054	Acute Encephalitis	1	—	1	—	1	—	—	1
064	Tick-bite fever	—	—	—	—	1	—	—	—
075	Hodgkin's disease	1	—	—	—	—	—	—	—
077	Other Infectious Diseases	—	—	1	—	—	—	—	—
Cancer and Other Tumours—									
100	Cancer of buccal cavity	2	—	—	1	1	—	—	—
101	" " Oesophagus	4	—	—	—	—	—	1	—
102	" " Stomach and Duodenum	21	3	3	12	11	—	1	2
103	" " Rectum	5	—	—	2	3	—	1	—
104	" " Liver	5	—	4	1	1	3	1	—
105	" " Pancreas	1	—	—	—	—	—	—	—
106	" " other Digestive Organs	10	—	1	2	10	—	1	—
107	" " Larynx	2	—	—	—	—	—	—	—
109	" " Lung	5	1	1	3	4	—	1	—
110	" " Uterus	1	3	1	1	—	—	1	—
111	" " Other female genital organs	2	1	—	—	—	—	—	—
112	" " Breast	17	2	—	1	1	—	1	—
113	" " Prostate	2	—	—	—	—	—	—	—
115	" " Male and female urinary organs	3	—	1	—	1	—	1	—
119	" " Other organs	32	4	1	12	5	1	10	1
136	Non-malignant tumours : other organs	1	—	—	—	—	—	1	1
Rheumatism, Diseases of Nutrition and Other General Diseases—									
149	Acute rheumatic fever	1	—	1	3	—	—	—	—
150	Chronic rheumatism	2	—	1	—	—	—	3	—
152	Diabetes	16	—	—	10	1	—	1	3
155	Exophthalmic goitre	—	—	—	1	1	—	—	—
163	Malnutrition	2	—	17	11	—	—	29	—
164	Other general diseases	—	—	—	—	1	—	—	—
166	Scurvy	—	—	—	—	—	—	1	—
168	Pellagra	—	—	13	—	—	—	8	—
169	Rickets	—	1	—	—	—	—	—	—
170	Other vitamin-deficiency diseases	—	—	2	—	—	—	2	—
Diseases of the Blood and Blood-forming Organs—									
203	Pernicious Anaemia	5	—	3	5	3	1	1	—
Chronic Poisonings and Intoxication—									
251	Chronic alcoholism	—	—	—	2	—	—	—	—
257	Other non-occupational poisoning	—	—	—	1	—	—	—	—
Diseases of the Nervous System—									
300	Intra-cranial abscess	—	—	1	—	—	—	—	—
301	Encephalitis	1	—	1	—	—	—	—	—
302	Pneumococcal Meningitis	1	—	3	—	1	—	1	—
303	Meningitis — other forms	5	2	7	10	—	—	7	3
304	Diseases of the spinal cord	1	—	—	—	1	—	—	—
305	Cerebral haemorrhage	31	2	18	28	7	—	7	1
306	Cerebral embolism and thrombosis	34	—	4	26	8	1	—	1
307	Hemiplegia	5	—	2	7	2	—	3	2
309	Epilepsy	—	—	6	2	—	—	3	—
310	Convulsions	6	—	7	5	1	—	1	—
313	Parkinson's disease	1	—	—	—	—	—	—	—
315	Other diseases of nervous system	2	1	4	3	—	—	3	1
317	Diseases of the ear	2	—	1	2	—	—	4	2
Diseases of Circulatory System—									
351	Pericarditis	—	—	1	2	—	—	2	1
352	Acute Endocarditis	6	—	3	3	3	—	—	—
353	Valvular disease—rheumatic	3	—	—	1	—	—	1	—
354	Chronic affection of the valves	6	—	6	6	1	—	1	—
355	Acute myocarditis	8	4	5	14	—	—	1	3
357	Chronic myocarditis	49	4	9	26	7	—	5	2
358	Diseases of coronary arteries and Angina pectoris	67	2	9	34	6	—	1	1

Code.	Disease.	Borough				Imported			
		E	C	N	A	E	C	N	A
359	*Heart disease—rheumatic	2	—	1	—	2	—	3	2
362	Arteria Sclerosis	52	—	3	19	5	—	1	2
365	Diseases of the veins	1	—	1	—	1	—	—	—
366	Diseases of lymphatic system	1	—	1	—	—	—	—	—
367	High blood pressure	4	—	—	8	1	—	—	—
368	Other diseases of circulatory system including hypotension	15	1	15	11	2	—	8	4
360	*Heart disease—not rheumatic	32	4	21	39	6	—	23	2
Diseases of Respiratory System—									
400	Diseases of nasal fossae and annexa	—	—	—	10	—	—	—	—
401	Diseases of Larynx	1	—	1	—	—	—	—	—
402	Bronchitis—acute	9	1	47	106	2	—	5	2
403	Bronchitis—chronic	9	2	15	36	3	—	1	2
404	Pneumonia—broncho	40	12	182	249	7	5	88	10
405	—lobar	16	2	34	46	5	1	20	5
406	—unspecified	2	1	—	5	—	—	1	—
407	Empyema	3	—	5	1	1	1	2	—
410	Chronic congestion of lungs	18	1	14	18	—	—	9	1
411	Asthma	16	5	7	22	2	—	—	4
412	Pulmonary emphysema	2	—	—	3	1	—	—	—
414	Miners' Phthisis, without T.B.	—	—	—	—	1	—	—	—
417	Abscess of lung	—	—	5	—	1	—	1	—
418	Other diseases of respiratory system	2	—	—	—	—	—	—	—
Diseases of Digestive System—									
450	Diseases of Teeth and gums	—	—	1	1	—	—	—	—
452	Other diseases of pharynx and tonsils	—	—	—	1	—	—	—	—
455	Ulcer of stomach	4	—	—	1	—	—	—	—
456	Ulcer of duodenum	3	—	1	3	1	—	—	—
457	Other diseases of the stomach	4	5	1	6	3	—	3	2
458	Diarrhoea and enteritis under 2 yrs.)	25	21	405	142	7	1	109	5
459	Diarrhoea and enteritis over 2 yrs.)	5	4	48	56	1	—	13	—
461	Appendicitis	5	—	2	4	5	—	2	1
462	Hernia	2	—	—	1	1	—	—	—
463	Intestinal obstruction	2	—	2	6	1	—	4	1
464	Diverticulitis	3	—	—	—	—	—	—	—
465	Other diseases of the intestines	3	—	1	—	1	—	—	—
466	Cirrhosis of liver with alcoholism	1	—	4	2	—	—	—	1
467	Cirrhosis of liver without alcoholism	7	—	3	5	2	—	2	—
468	Acute yellow atrophy of liver	2	—	3	1	—	—	1	—
469	Other diseases of the liver	4	2	15	5	2	—	16	—
470	Biliary calculi	1	—	—	—	—	—	—	—
471	Cholecystitis	5	—	—	1	—	1	—	—
472	Diseases of the pancreas	1	—	—	—	2	—	—	—
473	Peritonitis without stated cause	3	—	11	5	1	—	5	—
Diseases of the Urinary and Genital Systems—									
500	Acute nephritis	13	5	16	19	5	—	7	1
501	Chronic nephritis	31	3	6	29	6	—	2	1
502	Nephritis—other	18	1	5	6	6	—	4	3
503	Pyelitis, pyelonephritis	2	—	—	4	—	—	3	1
504	Other diseases of kidneys	2	—	—	1	—	—	—	—
506	Cystitis	1	—	—	—	—	—	—	—
507	Other diseases of the bladder	3	1	—	—	—	—	—	—
509	Hypertrophy	1	—	—	1	—	—	—	—
510	Other diseases of the prostate	4	—	—	1	2	1	—	—
512	Diseases of the ovaries	—	—	1	—	—	—	—	—
513	Diseases of the uterus	4	—	—	1	—	—	1	—
Diseases of Pregnancy—									
557	Other haemorrhages of pregnancy	4	—	5	—	2	—	1	—
561	Other toxæmias of pregnancy	—	—	1	—	—	—	—	—
562	Other diseases of pregnancy	2	—	1	1	—	—	—	—
566	Other haemorrhages	—	—	2	—	—	—	6	1
573	Other puerperal toxæmias	1	—	—	12	1	—	4	3
574	Other accidents of childbirth	1	—	2	4	1	—	3	3
Diseases of the Skin—									
600	Carbuncle	2	—	—	1	—	—	—	—
601	Cellulitis	1	—	3	3	2	—	1	1
Diseases of the Bone—									
650	Osteomyelitis	1	—	1	3	1	—	—	—
Congenital Malformations—									
700	Congenital hydrocephalus	1	1	—	2	—	—	—	—
709	Unspecified congenital malformations	1	—	—	4	—	—	—	—
Diseases Peculiar to the First Year of Life—									
750	Congenital debility	—	4	63	64	—	—	17	1
751	Premature birth	25	17	78	53	2	—	36	5
752	Intra-cranial haemorrhage	5	1	4	5	1	—	9	—
753	Other birth injuries	1	—	4	1	—	—	10	—
754	Asphyxia, atelectasis	3	1	14	6	—	—	9	—
757	Melaena Neonatorum	—	1	4	—	—	—	8	—
758	Other specified diseases	10	3	31	20	2	1	20	—

Code.	Disease.	Borough				Imported			
		E	C	N	A	E	C	N	A
800	Senility— Senility	28	1	8	22	—	—	6	—
	Violent or Accidental Deaths—								
852	Suicide : Poisoning	5	2	1	1	—	—	—	—
856	„ Hanging or strangulation	2	—	3	3	2	1	—	1
857	„ Drowning	1	—	—	—	1	—	—	—
858	„ Firearms and explosives	1	—	—	—	1	—	—	—
859	„ Cutting or Piercing instru.	—	—	—	—	1	—	—	—
	Homicide—								
866	Homicide : cutting instruments	1	1	40	4	1	—	3	—
867	„ : other means	3	3	8	1	3	—	—	—
	Accidental Deaths—								
868	Accidents on railways	1	—	6	—	2	—	5	1
870	„ on trolley-buses	1	1	—	—	—	—	—	—
871	„ motor-driven vehicles	2	1	7	7	1	—	6	3
874	„ motor-driven cycles	1	—	—	—	—	—	—	—
888	Accidental absorption of gases	—	—	2	1	—	1	1	1
891	„ burns	2	—	7	27	—	—	9	3
893	„ drowning	3	—	5	—	11	—	1	2
894	„ injury by firearms	2	—	1	—	—	—	—	—
896	„ injury by fall	12	1	4	2	4	—	7	—
908	Other accidents	1	—	1	3	—	—	—	—
910	Deaths from wounds military service)	—	—	—	—	1	—	—	—
951	Ill-defined causes	34	5	59	76	14	2	50	7
	TOTAL	988	194	1,961	1,694	271	38	1,132	160

2. INFECTIOUS DISEASES NOTIFIED DURING THE YEAR :
(Figures for 1940-41 in brackets).

	European		Coloured		Native		Asiatic	
1. Typhoid Fever.								
Local cases	123	(24)	13	(1)	164	(70)	22	(15)
Imported cases	6	(5)	—	(—)	6	(9)	4	(4)
Deaths (local)	10	(2)	1	(—)	39	(23)	10	(6)
Deaths (imported)	7	(2)	—	(—)	31	(28)	8	(2)
2. Cerebro-Spinal Meningitis.								
Local cases	12	(34)	1	(3)	6	(8)	—	(4)
Imported cases	22	(16)	—	(—)	2	(1)	—	(3)
Deaths (local)	1	(1)	—	(2)	—	(2)	—	(—)
3. Scarlet Fever.								
Local cases	195	(87)	2	(1)	—	(—)	—	(3)
Imported cases	22	(4)	—	(—)	—	(—)	—	(—)
Deaths (local)	1	(2)	—	(—)	—	(—)	—	(—)
4. Diphtheria.								
Local cases	262	(228)	26	(18)	63	(43)	14	(8)
Imported cases	55	(43)	3	(—)	18	(35)	7	(1)
Deaths (local)	2	(5)	1	(—)	4	(7)	—	(1)
Deaths (imported)	1	(3)	—	(—)	3	(4)	1	(—)
5. Erysipelas.								
Local cases	11	(18)	7	(3)	3	(—)	—	(—)
Imported cases	4	(—)	—	(—)	—	(—)	—	(—)
No deaths recorded.								
6. Poliomyelitis.								
Local cases	2	(3)	—	(—)	—	(—)	—	(—)
Imported cases	—	(—)	—	(—)	—	(—)	—	(—)
Deaths (local)	1	(—)	—	(—)	—	(—)	—	(—)
7. Gon. Ophthalmia.								
Local cases	8	(7)	3	(1)	53	(48)	18	(4)
Imported cases	—	(1)	—	(—)	3	(1)	—	(1)
No deaths recorded.								
8. Leprosy.								
Local cases	1	(—)	—	(1)	4	(3)	1	(—)
Imported cases	—	(—)	—	(—)	—	(—)	—	(—)
9. Puerperal Sepsis.								
Local cases	—	(4)	—	(1)	19	(4)	8	(1)
Imported cases	—	(—)	—	(—)	—	(1)	—	(—)
Deaths (local)	1	(1)	—	(1)	—	(4)	12	(5)
Deaths (imported)	1	(—)	—	(—)	4	(6)	3	(1)
10. Trachoma.								
Local cases	—	(—)	—	(—)	1	(—)	—	(—)
Imported cases	1	(—)	—	(—)	—	(—)	3	(—)
No deaths recorded.								

	European	Coloured	Native	Asiatic
11. Murike Typhus.				
Local cases	6 (—)	— (—)	2 (—)	— (—)
Imported cases	— (—)	— (—)	— (—)	— (—)
No deaths recorded.				
12. Typhoid Carrier.				
Local cases	— (—)	— (—)	5 (—)	— (—)
Imported cases	— (—)	— (—)	3 (—)	— (—)
13. Malta Fever.				
Local cases	— (—)	— (—)	— (—)	— (—)
Imported cases	1 (—)	— (—)	— (—)	— (—)
14. Typhus Carrier.				
Local cases	— (—)	— (—)	— (—)	— (—)
Imported cases	2 (—)	— (—)	— (—)	— (—)

INFECTIOUS DISEASES ADMITTED TO CITY FEVER HOSPITAL, CONGELLA, DURING THE YEAR.

	European	Coloured	Native	Asiatic	Total
Diphtheria	191	22	33	12	258 -
Scarlet Fever	145	2	—	—	147 -
Chickenpox	121	1	123	6	251 -
Measles	90	—	81	3	174 -
Mumps	70	4	41	6	128 -
Pertussis	95	3	26	4	128 -
Rubella	92	2	2	1	97 -
? Scarlet Fever	24	—	—	—	24 -
? Diphtheria	97	3	22	1	123 -
C.S. Meningitis	16	—	3	—	19 -
? C.S.M.	6	—	—	—	6 -
Typhus	7	—	—	—	7 -
Trachoma	5	—	1	—	6 -
Tick Fever	1	—	—	—	1 -
Scabies	2	—	—	—	2 -
V.D.	7	—	—	—	7 -
Typhoid	—	—	10	—	10
Peritonitis	1	—	—	—	1
Lodger	2	—	—	—	2
	979	37	342	33	1,391

Ambulance Removals : The following table sets out the number of cases conveyed in the Infectious Diseases Ambulances :

	European	Coloured	Native	Asiatic	Total
City Fever Hospital	759	38	63	13	873
Government Hospital	131	40	47	55	273
Other Hospitals	40	4	68	33	145
	930	82	178	101	1,291

Disinfecting Station and Laundry.

Municipal Departments.

City Fever Hospital — Disinfections	105,672
City Fever Hospital — Articles laundered	207,798
City Baths — Articles laundered	85,676
Ocean Beach — Articles laundered	118,054
Other Departments — Articles laundered	98,391
Total	615,591

Articles from private premises Disinfection	75,148
Rooms disinfected	1,907
King Edward VIII Hospital — Articles laundered	1,213,145
King Edward VIII Hospital — Disinfections	54,541
King George V Hospital — Articles laundered	221,440
Entabeni Nursing Home — Disinfections	186,665
Durban Turf Club — Disinfections	3,400
Chronic Sick Hospital — Articles Laundered	191,380
Indian Depot Hospital — Articles laundered	34,925
Child Welfare Society — Articles laundered	8,367
S.A.W.A.S. Residential Club — Articles laundered	486,682

Vaccination. (Courtesy, Deputy Chief Health Officer).

The following vaccinations of local residents were carried on during the year :

	Infant Vaccination	12 year old Vaccination
Births entered in Vaccination Register	3,148	—
Successfully vaccinated	1,285	58
Insusceptible to vaccination	84	—
Postponed owing to illness	103	—
Deaths of infants under 2 yrs.—registered	225	—
Exempted under Act 15 of 1928	99	155

3. TUBERCULOSIS. (July 1941 to June 1942).

Notifications.

Pulmonary :	European	Coloured	Native	Asiatic	
Local	74 (84)	47 (34)	424 (424)	249 (235)	794 (777)
Imported	27 (18)	2 (2)	66 (7)	14 (7)	109 (34)
Non-Pulmonary :					
Local	6 (5)	9 (3)	32 (62)	39 (42)	86 (112)
Imported	2 (2)	— (—)	2 (3)	— (—)	4 (5)

Deaths.

Pulmonary :	European	Coloured	Native	Asiatic	
Local	34 (41)	33 (35)	225 (256)	182 (212)	474 (544)
Imported	27 (17)	18 (7)	263 (303)	38 (22)	346 (349)
Non-Pulmonary :					
Local	2 (—)	2 (1)	21 (6)	17 (19)	42 (26)
Imported	4 (—)	1 (—)	38 (13)	2 (1)	45 (14)

REPORT BY ACTING TUBERCULOSIS OFFICER.

1. Tuberculosis Scheme. During the month of July, 1941, a comprehensive scheme for combating tuberculosis in Durban was submitted to, and accepted by, the City Council. This consists of the following items—

- (a) A Clinic for all races, centrally situated and equipped with an X-Ray apparatus capable of doing both full-sized as well as miniature radiography. The main functions of the Clinic will be diagnosis on a large scale, out-patient treatment, health-visiting activities, care (or after-care) work, admission of patients to hospital, the keeping of records and statistics, etc.

The estimated cost of the Clinic is £30,000, plus an additional £4,000 for X-Ray and equipment.

The plans for the building were drawn by the City Architect. The site originally chosen for this building was at the juncture of Sydney and Williams Roads, but for unavoidable reasons it was subsequently decided to utilise the vacant site lying between Lancers Road and Warwick Avenue.

- (b) X-Ray diagnostic facilities at the Municipal Native Administration Dept. Rather more than one quarter of Durban's population consists of Natives, the vast majority of whom remain in Durban for comparatively short periods. Approximately 7,000 Natives are medically examined each month at the Native Administration Department. It was therefore considered advisable to supplement these examinations by routine chest X-rays. In fact it was realised that an additional X-ray apparatus would be needed for undertaking this large amount of work. Any Natives discovered to be suffering from tuberculosis will be referred to the Main Clinic, probably about five patients per day on an average.

One half of the capital costs of this X-Ray plant and the accommodation required will be met out of the Native Revenue Account and the other half by the City Council.

- (c) A 200-bed Non-European Hospital at Congella, adjacent to the City Fever Hospital and King Edward VIII Non-European Hospital. Owing to the acute demand for more Native and Indian beds this hospital is urgently required. The estimated cost is £44,000, plus £2,500 for equipment.

- (d) A Tuberculosis Colony. This item has been left in abeyance pending cessation of hostilities.

2. Tuberculosis Staff and Activities. In the meantime and until the Clinic has been built, a Tuberculosis section of the Public Health Department has been developed in such a way that it can be transferred to the Clinic as soon as this is ready.

The staff of this section consists of a Tuberculosis Medical Officer, two European Health Visitors, two Indian Health Visitors, two Native Health Visitors, one clerk, and one Typist. It will require augmenting later on.

A Register is kept in which every case notified to the department is recorded. These cases are then followed-up by the Health Visitors and as many contacts as possible are sent to the present hospital out-patient clinics for X-raying or screening. A separate file is kept for each patient in which all necessary particulars and progress notes are recorded, so that all information regarding any particular patient, his home conditions and his contacts is readily accessible. There are at the present time approximately one thousand files dealing with City cases of all races. All these patients are visited periodically.

The principle of employing non-European Health Visitors has proved very satisfactory, provided they are properly trained and given regular guidance.

The tuberculosis staff also deals with such matters as arranging admissions to the various hospitals, referring contacts and suspects to the clinics, hospital fees, domiciliary benefits, keeping of statistics etc. As regards Native patients it is found very necessary to co-operate closely with the Union Health Department and the Native Administration Department. Large numbers of Native patients, on an average approximately 40 per month, leave Durban and return to their kraals. Particulars regarding these Native cases are supplied to the Union Health Department, who arrange for these patients to be visited and controlled at their homes.

3. Present Clinic Facilities. Europeans and Coloureds are catered for at the tuberculosis clinic at Addington Hospital where the activities are confined chiefly to diagnosis. Natives and Indians are provided with diagnostic facilities at the Clinics held at King Edward VIII Hospital and Mc-

Cord Hospital. The latter institution also holds a weekly artificial pneumothorax clinic for Natives and Indians. In addition, the medical staff at King George V Hospital voluntarily undertakes an artificial pneumothorax clinic once weekly, and also carries out a great deal of other out-patient work which should rightly be done by a municipal clinic.

The attendances for the year at these clinics are as follows :

Addington Hospital Tuberculosis Clinic :	1,099 attendances.
King Edward VIII Hospital Tuberculosis Clinic :	2,624 attendances.
McCord Hospital Tuberculosis Clinic :	932 attendances.
Total :	4,655 attendances.

4. **Present Hospital Facilities.** These are shamefully inadequate and there is always a fairly long waiting-list for all hospitals.

The following will indicate the various hospitals to which Durban patients are admitted :

Hospital.	Total No. of T.B. Beds.	Races admitted.
King George V.	129	Europeans, Coloured, Indians.
McCord	70	Natives, Indians.
Indian Immigration	94	Natives, Indians.
St. Aidan's	12	Indians.
Umlazi.	20	Natives, Indians.
	325	

In addition,, Addington Hospital admits a few European and Coloured cases, and King Edward VIII Hospital a few Native and Indian cases. These Patients are admitted only for humanitarian reasons and no facilities for proper isolation exist at these two hospitals. Also very occasionally Durban cases are admitted to Nelspoort, Sanatorium, Springkell Hospital and one or other of the rural mission hospitals in Natal. All these hospitals, however are practically always full.

It will thus be seen that there are only approximately 330 beds in Durban to which tuberculosis patients can be admitted. To make matters worse however approximately half of these beds are occupied by patients who are not resident in Durban.

5. **Preventorium.** (Pietermaritzburg). During the year 28 European children from Durban were admitted to this excellent institution. The great majority of these children had been in contact with Tuberculosis patients, and have derived considerable benefit from the care they have received.

6. **Care Committee.** (Natal Anti-Tuberculosis Association). This committee, which meets once monthly, consists of medical officers dealing with tuberculosis, of non-medical members of the Anti-Tuberculosis Association, and of the Municipal European Health Visitors. Its functions are to render assistance to the dependants of patients who are suffering from tuberculosis, and also to assist patients themselves whilst they are awaiting admission to hospital or during their subsequent convalescence. Such assistance is usually in the form of essential foods and also towards rents. The total funds available for this purpose per annum for the Province of Natal are approximately £1,500. £900 of this is provided by the King George V Jubilee Fund and the balance by subscription. These funds are inadequate.

During the year the following numbers of cases were investigated by the Care Committee and the vast majority of these received financial assistance :

Europeans	66
Coloureds	110
Natives	53
Indians	183
Total :	412

The scope of this Committee might with advantage be enlarged in various other directions, particularly towards the question of rehabilitation of recovered cases.

7. **Friends of the Sick Association.** This interesting Association of voluntary workers was recently formed with the purpose of assisting Indian patients and their families in as many ways as possible.

Their present activities consist of visiting patients at their homes and of giving assistance in cash or kind to needy families. The funds of this Association are raised by subscription. There is tremendous scope for this work owing to the large degree of family tuberculosis amongst Indians, which in turn is partly due to the shortage of hospital beds and the degree of overcrowding in the majority of Indian homes.

This Association contemplates the establishment in the near future of a settlement for Indian contacts and for children suffering from non-communicable tuberculosis.

The Association is doing splendid work, and forms a most useful link between the Indian community and the Public Health Department.

8. General Observations.

Hospital Accommodation. From the point of view of progress towards obtaining additional hospital beds for tuberculosis patients this has been a most disappointing year. In fact the year has ended without any real progress having been made in this regard. During the war the popula-

tion of Durban has grown considerably and is now in the neighbourhood of 300,000. As pointed out above there are only approximately 165 beds, out of a total of 330 tuberculosis beds in Durban, occupied by Durban residents of all races.

If we underestimate the position and assume the average incidence rate of this disease for all races to be as low as one-half per cent. only, then there must be at least 1,500 tuberculosis patients in Durban and fully one-half of these (i.e. 750 patients) should be in hospital. From our knowledge however, of the rate of incidence amongst the non-European races it is considered that there must be nearly 4,000 cases of tuberculosis in Durban and that at the very least 1,000 additional beds are required. Alternatively, by assessing the number of beds required by the method adopted in European countries, viz. one bed per death from tuberculosis, we find there were 907 deaths from tuberculosis in Durban during the year, so that at least 1,000 beds are required, if we allow for the higher incidence amongst non-Europeans.

It will probably be quite three years before military hospitals become available for tuberculosis cases and in the meantime the position will deteriorate still further. Granted that, owing to war conditions, there are considerable difficulties to be faced in providing, equipping and staffing new hospitals, but these difficulties are not insurmountable, and it is absolutely essential to provide a minimum of two or three hundred beds for non-European patients as soon as possible. This can be done, and there is no need for so much delay.

From time to time one hears a great deal about the prevention of tuberculosis by providing proper housing and adequate food for the population. Certainly these measures are most important, but the first step to be taken towards preventing this disease should be the isolation and removal to hospital of the majority of communicable cases of tuberculosis.

Native Tuberculosis. There are in Durban approximately 80,000 Natives and about 10 per cent. of this number are permanent residents in this City. The remainder merely come to Durban to seek employment and then after a while, the average period being about a year, return to their kraals. In rural areas there is comparatively little tuberculosis amongst Natives. According to one authority on this subject the tuberculosis rate amongst Natives in Durban is about six times greater than in the Native rural districts, this being due of course to the bad urban housing conditions and to inadequate and unbalanced diet.

Consequently we have large numbers of healthy Natives arriving daily in Durban, and a proportion of these developing tuberculosis and returning in an infectious condition to their kraals in various parts of Natal. Statistics kept during the last six months show an average of 41 tuberculosis Natives per month leaving Durban for their homes. The number must be larger than this for many cases must leave Durban undiagnosed and unnotified.

The same process is probably occurring in respect of other cities as well, so that tuberculosis is being steadily disseminated amongst the rural Native population.

An attempt is being made to control this spread of infection by co-operation between this department and the Union Health Department in Durban. Particulars regarding every known Native case who leaves Durban are forwarded to the Union Health Department, who then has each case followed-up at his home and given appropriate advice regarding precautions against spreading tuberculosis. Whenever any patient returns to Durban, which is infrequently the case, this department is advised accordingly.

During the year 456 Native cases actually living in Durban were notified to this Department. Reliable notification of cases arriving in Durban from outside the borough has only occurred during the last two months of the municipal year, but it is known for certain that the number of ex-borough cases arriving in Durban for treatment is greater than that of City Native cases, so that approximately 1,000 Natives are discovered in Durban each year suffering from tuberculosis. Approximately half this number die in Durban and the remainder return to their homes and infect others. These facts alone are surely sufficient evidence to reveal the hopeless inadequacy of control measures regarding tuberculosis amongst Natives.

Indian Tuberculosis. During the last nine months every notified case of tuberculosis amongst Indians in Durban has been carefully investigated. Owing to inadequate diagnostic facilities it has not been possible to X-ray every contact but a large proportion of the contacts have either been screened or X-rayed, and infants have been patch-tested in large numbers.

As would be expected the incidence rate in Indians lies midway between those of the Native and European races. 288 City Indians were notified during the year, and there were 199 deaths.

Two very marked features regarding this disease in Indians are, firstly, the abnormally high degree of children affected by tuberculosis of childhood type, and secondly, the large amount of family tuberculosis. One family consisting of father and mother and seven children revealed disease in all excepting the father and three had died. Another large family consisting of 37 persons representing four generations, showed 13 of its members infected.

These features are largely explained by the fact that in our Indian community large families are common and there is much poverty and unemployment, with the result that there is a shocking degree of over-crowding and malnutrition. Unlike our Native population which periodically returns to comparatively healthy living conditions in the country, a very large proportion of the Indian population lives permanently under unwholesome conditions. From the public health point of view it can be taken for granted that it will be more difficult to control tuberculosis amongst the Indian population in Durban than in respect of any of the other races.

In conclusion I wish to record the appreciation of this department for the helpful co-operation given during the year by the staffs of the various hospitals which accommodate tuberculosis patients, and to gratefully acknowledge the assistance so readily given by Dr. B. A. Dormer, Tuberculosis Officer for Natal, in all matters regarding the control of tuberculosis in this City.

VENEREAL DISEASE: (City Venereologist's Report).

During the year the new V.D. block at Addington Hospital was completed and the out-patient clinic brought into use. The male wards have been fully occupied during the year but the female wards have not yet been occupied by reason of the difficulty in obtaining the necessary staff. War conditions have created additional difficulties in dealing with European V.D. In addition to the large number of troops, there has been great shipping activity in the Port involving the presence of a large floating population of merchant seamen. During the year under review, the new non-European V.D. block at Congella was also completed and the out-patient clinic started work in the new premises in May.

The new wards, which are nearing completion, will be administered by the Provincial Hospital authorities under the Co-ordination of Hospitals Scheme, whilst the out-patient clinics will continue for the present to be administered by the Municipality. With the exception of Dr. G. D. H. Wallace, Asst. M.O.H. (Venereologist) the non-European Clinic is being run by an entirely non-European staff under his direction. This arrangement appears to be working quite satisfactorily.

Dr. Ismail (Indian woman) and Dr. Dhlamini (Bantu) assist at the Clinics three mornings and three afternoons per week respectively. The Clinic staff comprises four trained nurses, three orderlies, two clerks and a dispenser (all Bantus).

Both at Addington and at Congella we have been treating large numbers of soldiers and sailors but the Military and Naval Authorities are shortly making arrangements to treat their own cases. This influx of military cases has resulted in our non-European wards being more than usually over-crowded but this position will be relieved when the new wards are available.

Sister Taylor was appointed to do 'follow up' and contact work with female Europeans and Coloureds at Addington. As soon as the female wards are opened at Addington, a re-arrangement of staff will be necessary and a 'follow up' Health Visitor for males will be necessary. The 'follow-up' of contacts of merchant seamen is virtually impossible as they are rarely ever able to give any information as to the source of their infection.

Clinics are held daily at Addington and Congella. The clinic at Congella is practically a non-stop service operating from 9 to 1 p.m. and 2 p.m. to 5 p.m. every day except Saturday afternoons and Sundays. On Mondays, Wednesdays and Fridays two doctors are at work all day.

Figures for year ending 30th June, 1942 :

Hospital.	In-Patients.			No. of Out-Patients.	Total of Out-Patient Attendances.
	M.	F.	Total.		
Addington Hospital (Europeans)	371	—	371	660	5,894
McCords Hospital (Non-Europeans)	146	41	187	510	4,402
Congella (Non-Europeans)	2,924	1,550	4,474	12,144	40,854
Total	3,441	1,591	15,032	13,314	51,150

No. of Treatments at Out-Patient Departments (City & Imported).

	E.*	C.	N.	A.	Total.
Addington Hospital	9,838	—	—	—	9,838
King Edward Hospital	—	1,336	31,743	3,521	36,600
McCord Zulu Hospital	—	202	3,580	110	3,892
Total	9,838	1,538	35,323	3,631	50,330

*Only Europeans are now being treated at Addington Hospital.

V.D. Cases Admitted to Hospital (City & Imported).

	King Edward VIII. 1940-41.	
Syphilis: Primary and Secondary	2,302	2,510
„ Tertiary	45	61
„ Congenital	159	199
Gonorrhoea	1,306	1,853
Others	858	71
Total	4,670	4,694
Deaths	17	12
Absconders	35	20
Discharged as cured	3,052	2,825
Operations performed	84	111

No. of Treatments at Out-Patient Departments (City & Imported).

	E.*	C.	N.	A.	Total.
Addington Hospital	9,838	—	—	—	9,838
King Edward Hospital	—	1,336	31,743	3,521	36,600
McCord Zulu Hospital	—	202	3,580	110	3,892
Total	9,838	1,538	35,323	3,631	50,330

5. Plague Precautions.

Pest Control. During the year ending June, 1942 several problems relating to Pest Control were encountered, as a result of war-time restrictions control measures involving structural alterations were often impracticable as building materials were almost unobtainable. Temporary control measures were impeded by scarcity of materials such as ingredients for sprays, insecticides, baits etc. Control work dealt with mosquitoes, rats, bugs (Cimex), cockroaches, flies, fleas, ants, ticks, etc. The following briefly summarises the scope of activities :

Rodents. A considerable increase in the rat population was noted, calling for intensified measures but the position is fast being remedied by means of systematic gassing and poisoning preceded and followed by trapping for Plagus "Index." Carcasses were regularly collected and examined for B. Pestis.

Regular poison-baiting of premises in commercial and industrial areas produced excellent results. In this connection, it is interesting to note that phosphorous poisons, admittedly the best, can be replaced by arsenic and barium provided they are made sufficiently attractive. Fruit, vegetables, treacle, meal and meat were used to this end.

Cyanogas dust-pumps were exclusively used with excellent results, tending to offset the problem created by shortage of rat-proofing materials.

A squad of Indian trappers with cycles and a specially equipped panel van were constantly engaged in Plague control work in the "risk" areas.

Districts contiguous to shipping and railway sidings received special attention.

Bugs (Cimex). Despite war conditions the number of cyanide fumigations by private enterprise increased from 2,120 to 2,613, whereas the number of departmental fumigations decreased.

Black-out conditions and inferior quality of sealing paper and paste definitely increased the risk of syanide fumigation and in consequence increased the work of the inspectional staff.

Cockroaches. Roach Control was at a standstill for three months as suitable sprays were unobtainable. Operations were resumed on a reduced scale. Good results were obtainable by the use of patent manhole covers containing bait-boxes. Several types of poison-bait were used with satisfactory results and these experiments are continuing.

General. Complaints relating to the prevalence of ticks and lice were attended to. Complaints relating to nuisance from ants, bees, spiders etc. were referred to private enterprise which catered for this type of work.

The Pest Control laboratory was re-opened in April and examinations of rodents and mosquitoes were again carried out, and a 5% check done by the Government Laboratory.

Insecticides, sprays, baits, etc. are being investigated by the laboratory staff.

Mr. R. O. Stewart, Supervisor, returned in February on temporary release from naval duty.

Harbour Control (Maydon Wharf). Supplied by Port Health Authority).

	Black Rats.	Brown Rats.	Mice.	Sent to Lab. for exam.
Shipping (Fumigation and Trapping)	5,502	—	590	353
Point Harbour Area	416	39	341	278
Point Outer Area	399	336	218	157
Congella Area	429	1,317	1,250	600
	6,746	1,692	2,399	1,388

6. Endemic Control.

(a) **Zymotics.** Admissions to the City Isolation Hospital numbered 1,391 as against 1,652 in the previous year. The decrease, 261, relates to the lessened incidence of the minor infections → Measles and Whooping Cough.

(b) **Enteric Fever.** 338 City and Imported cases were notified as against 128 in the previous year. Native cases numbered 170 an increase of 91 reflecting increasing endemic prevalence in the congested shack settlement located in areas lacking Corporation water-supply. For similar reasons, the disease has been excessively prevalent among Natives in many rural areas whence Durban draws its labour and much of its milk supply. An epidemic 'potential' thus accumulated in the form of an enhanced enteric 'carrier state' among Native labourers including dairy employees, resulting in several outbreaks of milk-borne enteric. Over a period of five months from January to May, ninety-nine cases of the disease occurred among European consumers of milk from seven dairies constituting the heaviest prevalence for 20 years.

Out of the total, 59 cases were traced to one dairy where great difficulty was experienced in locating the sources of infection. No 'reactors' were disclosed after two series of Vi-tests. A third series disclosed four 'reactors' — two of whom had been returned as negative in first series and two of which had missed the first series. Both the latter had joined the dairy staff after infectivity began.

Possible alternative sources of infection in this instance were (1) environmental defects in the form of disused and exposed septic tank on the premises; and (2) the clandestine introduction of unlicensed milk supplies.

Sealing of the disused septic tank and later, re-opening, emptying and filling with earth appeared to arrest the course of infectivity. This was later proved to be coincidental, as the completed graph of incidence was typical of a human 'carrier' infection, of which either the local or the imported supplies could have been the vehicle.

Actual infectivity ceased at this dairy almost three weeks before a final control blood-test revealed four positive vi-reactors.

For periods covering blood-tests and the correction of environmental defects, the milk was heat-treated in cans on the premises. Infectivity ceased during the periods of heating, but resumed activity thereafter owing to presence of undisclosed carriers.

Over all the affected dairies, Vi-testing disclosed a presumptive or potential 'carrier state' of approximately 10 per cent. among dairy employees which is four or five times in excess of the general average and threatens to maintain a high enteric 'potential' indefinitely.

It is understood that the previous milk-borne enteric outbreak (in 1922) of over 300 cases was attributable to human 'carrier' agency — the vehicle in that instance being a pasteurised milk supply. Obviously, 'carriers' handling milk after it has been pasteurised are as potentially dangerous as 'carriers' among all classes of workers handling a raw milk supply. It is safe to conclude that infection in the case of milk-borne enteric outbreaks — other than those associated with polluted water-supply — derives from the human 'carrier' direct i.e. via his infected hands or clothing and not through the intermediary of fly-vectors.

Experience gained as the result of the 1942 outbreak of enteric points to certain developments in milk control for the purpose of prevention:

1. Control of milk-handlers to exclude potential 'carriers' of typhoid and paratyphoid infection;
2. Pasteurisation of all raw-milk supplies where the exclusion of 'carriers' cannot be effected;
3. Exclusion of 'carriers' from the staff of pasteurising depots;
4. The immunisation against typhoid of all 'infection-free' milk-handlers;
5. Extension of laboratory facilities to overtake the work envisaged under paragraphs 1 and 3 aforesaid.

Underlying considerations of prime importance are:

1. The efficacy of the Vi-test for the detection of 'carriers';
2. General measures for the suppression of enteric among the Native population by means of the clearance of slums, the extension of safe water-supplies and water-borne sewerage;
3. General immunisation against Typhoid Fever.

As a temporary measure of control, the public were advised to boil all milk used for domestic purposes.

The acute intestinal diseases (Typhoid, Dysentery, Diarrhoea and Enteritis) greatly increased in prevalence during the year.

The subjoined table compares the 1942 deaths, all races, from those diseases, as compared with the two preceding years:

	European			Coloured			Native			Asiatic			Total		
	'42	'41	'40	'42	'41	'40	'42	'41	'40	'42	'41	'40	'42	'41	'40
Typhoid	10	2	5	1	—	—	39	23	12	10	6	7	60	31	24
Dysentery	12	9	7	7	4	3	253	128	105	33	18	12	305	159	127
Diarrhoea & Enteritis	30	29	19	25	23	17	453	313	267	198	175	124	706	540	427
	52	40	31	33	27	20	745	464	384	241	199	143	1,071	730	578

Over three years, the total mortality from those diseases among all races has virtually doubled. The progression from bad to worse is shared by each race for each of those diseases and its significance is not lessened by the influence of milk-borne typhoid infection, which affected Europeans exclusively and several localised instances of water-borne typhoid among Natives.

The origin of acute intestinal infections is an insanitary living environment, that is say, bad housing conditions and this does not mean bad structurally, but bad specifically in relation to the essential services of pure water-supply and sanitation. Unless and until Durban's non-European population is properly housed, the acute intestinal infections must and will increase in something like geometric progression. By proper housing in this connection is meant a house supplied with Corporation water and water-borne sewerage with each house having its own sanitary annexe i.e. water-closet and bathroom or spray-point. Proof of this conclusion resides in the fact that dysentery and enteritis prevail in water-supplied and sewered housing, such as the Magazine Barracks, where the sanitary annexes are communal — and because of that circumstances. In other words, it is not sufficient to supply a house with Corporation water and sewerage — unless and in addition, the house is provided with its own closet.

In the peripheral shack areas, which are only partly supplied with Corporation water and stercus removal service and not at all with water-borne sewerage, the conditions favouring the development and spread of acute intestinal infections are at their optimum.

The danger of such infections reaching the European section of the population who employ shack-dwellers in their homes, hotels, restaurants, dairies, food-shops and food-factories grows more insistent yearly and in proportion as these diseases increase in prevalence among the non-Europeans.

Apart from such special and partial ameliorative or protective measures as :

- (1) the detention and removal of infective 'carriers' among food handlers;
- (2) anti-typhoid inoculation of healthy food-handlers;
- (3) general immunisation against typhoid;
- (4) pasteurisation of milk supplies —

the prevention of acute intestinal disease necessitates a radical policy of slum elimination and re-housing for the non-European sections of the population.

Comparing non-European deaths from Pulmonary Tuberculosis and the Acute Intestinal Diseases over the last three years as follows (City only):

				Native.		Asiatic.	
				P.T.	A.I.D.	P.T.	A.I.D.
1939-1940	.....	.....	.....	175	384	145	143
1940-1941	.....	.....	.....	256	464	212	199
1941-1942	.....	.....	.....	237	745	195	241
Totals	.....	.....	.....	668	1,593	552	593

— it will be noted that

(1) among Asiatics, the Acute Infectious Diseases are now greater killers than Pulmonary Tuberculosis and their prevalence is rapidly increasing, whereas Pulmonary Tuberculosis has definitely declined during 1942.

(2) among Natives the Acute Intestinal Diseases are consistently greater killers than Pulmonary Tuberculosis, and that prevalence is increasing with startling rapidity, whereas Pulmonary Tuberculosis showed a definite decline in 1942.

MALARIA.

				European.	Coloured.	Native.	Asiatic.
Deaths (Local)	.....	.....	.....	1	2	—	—
Deaths (Imported)	.....	.....	.....	6	—	—	—
Ditches cleared (yds.)	.....	.....	.....	519,008.			
Land cleared	.....	.....	.....	48 acres 18.104 pcs.			
Larvacide used	.....	.....	.....	109 gals.			

Mosquitoes. A late summer spell of intermittent high temperatures and relative humidities coupled with irregular and frequent rainfalls occasioned prolific mosquito breeding. Free surface drainage by means of temporary ditching and analization was effected in all risk areas. In sparsely populated areas house-spraying was undertaken, whereas in densely populated areas anti-larval measures proved more suitable. A. Gambia (malarial vector) breeding was prevalent in most areas indicating a near approach to conditions preceding the 1932 period of epidemic prevalence.

It was noteworthy that a very small percentage of Gambia larvae reached the adult stage. Large collections were repeatedly checked against house-spraying and all tests gave the same result. Low rainfalls followed by hot sunshine spells causing pools to dry up rapidly materially assisted the work of control.

Intensive propaganda amongst non-European shack-dwellers was undertaken by trained Native pest patrolmen. The use of ordinary cooking oil to control breeding in wells, water butts etc. was successfully adopted in preference to the use of paraffin or old engine oils.

7. WATER SUPPLY. (By courtesy of the City & Water Engineer):

WATER : Chemical and Bacteriological Analysis.

(a) Chemical :

Colour	.....	Good.	Sediment	.....	.....	.....	Nil.
Turbidity	.....	Nil.	Re-action	.....	.....	.....	0.8

Results expressed in parts of 100,000

Total Solids	.....	9.76
Loss on Ignition	.....	1.96
Chlorine	.....	1.76
Nitrites and Nitrates	.....	Nil
Saline Ammonia	.....	0.005
Albumoid Ammonia	.....	0.007
Total Hardness	.....	3.90
Permanent Hardness	.....	1.27
Iron	.....	Trace
Poisonous Metals	.....	Nil

(b) Bacteriological. Usual high standard maintained throughout the year.

(c) Service Reservoirs. There are 21 service reservoirs with the total capacity of 28,189,000 gallons.

Purification. The raw water was treated and passed through slow sand filters at both the Umlaas and Coedmore Works. At Northdene there is a dual system of filtration comprising a primary filtration through a Rapid Gravity Plant and secondary filtration through Slow Sand Filter Beds. In all cases the filtered water is sterilized by treatment with liquid chlorine with completely effective results.

The Emergency Pumping Scheme on the Umlaas River to deal with 5 million gallons per day operated over the current year. Here again the dual system of filtration has been adopted and the filtered water is sterilized by the Chloramine System.

The average daily consumption is in the vicinity of 15,429,017 gallons.

Bacteriological Examination. Regular bacteriological and chemical examinations are made at the Government Laboratory in Durban, yielding results comparable with those of any water supply in the world.

208 Samples were taken and submitted to Government Laboratory for bacteriological examination plus 52 samples submitted to City Analyst for chemical examination.

All samples were certified to be satisfactory.

CLEANSING SECTION.

Cemeteries. Municipal Cemeteries have been well conducted and maintained. Private cemeteries were regularly inspected at least monthly and were generally kept in a satisfactory condition.

The system of checking all returns of death has been maintained and the burial places of all bodies ascertained.

Interments. 6,846 Burials took place, 5,772 in Municipal, and 1,074 in private cemeteries.

Cremations. 260 Europeans and 99 Asiatics were cremated.

Free Burials. There were 142 free burials authorised on behalf of the Corporation, 122 of that total were Natives.

Conservancy. There were 9,952 buckets in use at the end of the year, a slight increase over the figure for the previous year. The City and Water Engineer informs me that applications for extension of the service into new areas had to be refused owing to the uncertainty when replacements of the motor lorries used in the removal of the buckets could be obtained.

The service has been conducted in a satisfactory manner.

Refuse Removal and Disposal. 271,668 Cubic yards of refuse were collected and removed from private premises. 15,004 Cubic yards were dealt with at the Point Destructor, and as in past years the remainder was utilised for land reclamation by Controlled tipping. The usual precautionary measures of spraying with insecticide and covering the rubbish completely every day with a layer of earth were carried out. The service was conducted with the customary regularity and efficiency.

Dead Animals. 275 Dead animals were removed and buried.

Street Cleaning. 43,786 Cubic yards of rubbish were swept and removed from the streets, which received the same regular attention as in other yards.

Public Conveniences. New conveniences for Europeans were constructed and brought into use at Snell Parade, the Amphitheatre and the Esplanade, and for non-Europeans at Old Dutch Road Park reserve, and at the Market Concourse.

Fly Destruction. Continuous precautions are taken to prevent fly breeding at the various refuse tips.

9. **MEAT SUPPLIES.** The number of animals slaughtered during the year was as follows:

1941-42	Bovines.	Swine.	Sheep.	Goats
	62,043	65,533	382,810	12,467

Carcases, Organs or Parts Condemned.

No. of carcases	1,782	2,994	1,662	252
Portion of carcases weight in lbs.	55,846	4,630	630,226	—

Routine health supervision over butchers' shop, cold storages, markets, meat transport vehicles etc. continues to be maintained at high level of efficiency.

10. MILK SUPPLY.

System of Supervision and Control. During the period under review 148 samples of milk were taken for chemical examination, 141 were found satisfactory, whilst 7 were unsatisfactory. In each case the deficiency was investigated and dairymen concerned were 'warned.'

Some 167 samples of milk were taken and tested for dirt by means of the Disc Sediment Test. Each unsatisfactory result was followed up and the dairymen concerned were advised and instructed in correct methods of milking.

A record is kept of all discs, examination whereof will disclose that the town's milk is very clean.

System of Registration and Inspection of Dairies. All dairies situated within the City boundaries are licensed by the Municipality and no licence is granted unless the dairy conforms in every respect with the Public Health By-laws relating to Dairies and Cow Sheds.

Premises situated outside the City are likewise inspected and a permit is granted only when buildings, plant and equipment conform with similar requirements.

Some 670 inspections of dairies were carried out during the year.

City Veterinary Officer's Report for the year ending June 30th, 1942.

Diseases such as Tuberculosis and Mastitis have not been so prevalent during the year under review, due to a great measure to the removal from dairy herds of animals showing definite — and in some cases suspicious — symptoms of disease. This refers more especially to Tuberculosis. As regards Mastitis, practically all well-marked cases have been removed, infected animals act as foci of infection.

Bovine Tuberculosis. In two instances positive results were obtained from the biological test of milk samples. In one herd, 140 cows were examined and 14 samples of milk obtained from abnormal udders. Upon microscopical examination of these samples one was found to be suspicious. A puncture smear taken from the mammary substance of the animal concerned showed tubercle bacilli. The animal was destroyed.

In the second instance — wherein 37 animals were examined — 4 samples of milk were found to be negative on microscopical examination. There was, however, a history of a cow having been sent for slaughter some 5 weeks prior to my visit. Enquiry at the Abattoir elicited the fact that the animal showed T.B. lesions in that this animal was in all probability the source of infection.

During routine inspection of dairies I have advised that certain animals should be disposed of for various reasons, more particularly as suspicions of Tuberculosis, severe cases of mastitis or emaciation and for other various reasons. Suspicious cases of tuberculosis — at least a percentage of them — could I think very reasonably be regarded as a potential source of milk-infection through developing a tubercular mastitis or even by voiding Tubercle bacilli from the intestine.

It is of interest to note that of all dairy stock sent to the Abattoir during the last few years for various reasons the number showing evidence of tubercular lesions were as follows:

Year,	T.B. Lesions.	General Lesions
1938-1939	48	13
1939-1940	38	13
1940-1941	5	5
1941-1942	11	11

These figures and details were obtained from Abattoir records.

Testing of Milk Samples by means of the sediment disc test is, I consider quite a satisfactory method as it is effective, inexpensive, rapid and easily carried out. It reflects at once any carelessness in the handling of milk, and can be carried out at the dairy concerned. The disc obtained is shown to the dairyman and any steps necessary to improve conditions are then explained. There is no doubt, in fact it is only logical, that the bacterial content of milk is greatly influenced by the amount of contained dirt as demonstrated on the disc. This statement is borne out by an extract from an American Journal which states:

“Filter discs were used in sediment tests by farmers for a six-day period on the Milk from 8 Wisconsin farms. Tables were available showing the extent of correlation between the results of the sediment tests and the methylene blue reduction time, and improvement was noticed during the period of performing the disc test.”

This test should, I consider, remain in force — even in the probable event of a return to the bacteriological test — owing to the satisfactory nature of the result and the facility with which it can be obtained.

Pasteurization of Milk. Hitherto the ‘holder process’ has been looked upon as the only safe method of treating milk — where it is held at a temperature of 145 degrees F. for 30 minutes and rapidly cooled — but of late another method has come into vogue known as the ‘high temperature short time’ treatment, and has proved eminently satisfactory and is now recognised overseas, as shown in an extract from the regulations of Milk (Special Designation) Order of 1941 — stating

“— enables a licensing authority to grant a pasteurizing licence in respect of ‘high temperature short time’ pasteurization which effectively destroys any disease-producing organisms in the milk, providing the apparatus is worked with proper care. At the same time the apparatus needed is much smaller and simpler than is required for the holder method. It can be more easily worked i.e. can be quickly started and stopped and readily cleaned . . .”

By this method the milk is retained at a temperature of not less than 162 degrees F for at least 15 seconds.

A plant of this type has been operating in Durban for some years now and the results of milk tests from this depot have always been good,

Milk supplies. During the year approximately 14,553 gallons of milk have been supplied to Durban daily. Of this amount:

6,786 gallons in raw milk.
7,767 gallons in pasteurized milk.

Raw milk obtained from the following sources:

From local licensed dairies	5,419 gal. per day.
By road from dairies situated outside the borough	867 " " "
By rail from dairies situated outside the borough	500 " " "
	<hr/> 6,786
Pasteurized milk obtained from four depots	7,767
	<hr/>
Total	14,553 gals per day.

11. OTHER FOOD SUPPLIES. As the result of constant supervision by this Department the articles condemned at the City Market as unfit for human consumption included :

Venison (lbs.)	1,726 lbs.
Giblets (packets)	75 packets.
Dressed poultry	1,213
Guinea Fowl	42
Hares	6
Vegetables (bags)	206 bags.
Fruit (packets)	42 packets.
Fruit Dried (bags)	3 bags.
Cream (bts.)	774 bottles.

12. CHILD HEALTH. Report of the Child Health Medical Officer, for the year ending June 30th, 1942.

This year I have completed twenty-one years of service in the Public Health Department of the Durban Corporation. For that reason I should like to place on record my impressions of what a Child Health Clinic has done for the City of Durban, what the limitations of such a Clinic appear to me to be and to indicate where I feel that future efforts should be directed.

For a long time after I took over the direction of the Child Health Section of the Public Health Department in 1921, attendances at the Clinic were small, a large number of the mothers attending just came along, not for advice, but to tell us, for our benefit, how they were feeding their babies and bringing up their families; others came with sick children just to see if the Clinic Doctor's advice corresponded with the Family Doctor's advice (being as careful as possible not to give away the fact that they had had advice already).

At that time we thought this attitude merely amusing and that we should soon be able to change it but, after twenty-one years of trying to impress on the public that a Child Health Clinic is an institution for teaching the underlying principles of health and not a place for treating sick children, it is astonishing and discouraging to find how little the point of view of the average mother has changed — at least it would be astonishing had we not in that time come to see that the reason for this attitude in so many people is an almost complete lack of background or foundation of health principles. There are many mothers coming to the Durban Child Health Clinic to-day who really want to do the best for their family — they take our advice but the large majority of them mix that advice with what they get from neighbours and advertisements — thus rendering our teaching almost ineffective.

The reason for this attitude of indifference towards physical health appears to be similar to that of why mass insanity manifests itself from time to time in the form of wars. To those of us who are not actively engaged in the present struggle for world administration but who perforce must sit and watch the march of time performed by figures in uniform and ponder upon the cause, it seems to become more and more clear that the same reason underlies physical and mental ills, malnutrition and wars. Refraining from putting knowledge into practice for fear of interfering with vested interests seems no more sound or sane a way of dealing with individuals than are wars for the purpose of acquiring territory, reducing population or experimenting in methods of administration for social betterment.

Lack of method of disseminating nutritional knowledge has been the cause of much ill-health, but as wars on any scale are invariably followed by famine, disease, commercial depression and social revolution, would it not be possible by a little forethought to turn these sequelae to good account by arranging beforehand to stage a revolution in South Africa which would really be of use? I do not refer to a revolution dealing with capitalism and labour — such revolutions are unlikely to be wholly successful, but to a revolution which eventually would go much deeper. I refer to a Revolution in the System of Education.

At the present time there is much talk of Social Security. The wish to provide a living wage for all is a most estimable and laudable one but Social Security can never be brought about by money only — there is far more wrong at the root of the great social structure than poverty.

The physical condition of malnutrition is not a class disease — it is a condition which affects all classes and this is so because health education is inadequate for all classes. It is not always those who are in receipt of inadequate wages who apply to organisers of good deeds for assistance. Any department or society which deals with the disbursing of money or distribution of foodstuffs has the experience at times of having given help to people who have asked for it on false grounds.

The telling of lies is due as much to a diseased condition of the mind as malnutrition is due to a diseased condition of the body and in this respect it would seem as if little progress had been made since Plato put the question "Is it not clear that it is impossible at one and the same time to worship money and keep a high standard of honesty (and health) among the citizens?"

If the present human race is to benefit from the misery and suffering all are going through to-day, we must see to it that all are healthy both physically and mentally. Having accomplished that, there would be little difference in establishing any code of Social Security. If this ideal is not achieved, might we not have to face later a further war of extermination?

It is known that a physically and mentally stable race could be reared provided all had the knowledge for this purpose. What is required to this end, is a complete system of health education, therefore it is difficult to understand why a revolution in the teaching of health has

not come earlier. It is inferred frequently that a system of health education already exists — health teaching is certainly given at some stages in the growth period but there is no complete system of health education in operation in this country.

Child Health Clinics which deal with the individual from conception to the age of about 2 years are probably one of the few established cogs in the wheel of health education. Their value is gauged by any fall there may be in the local infant mortality rate. This fall is taken to be indicative of efficient Public Health administration. As elsewhere, this fall has been accomplished in Durban.

However, unless accompanied by health education instruction for toddlers, pre-school children, school children and adolescents, Child Health Clinics can do little towards the coveted goal of positive health.

It has been obvious to many of us employed in Child Health work that the teaching of health to women after they have become mothers was not accomplishing the end originally aimed at. Under present conditions a first baby is always an experiment — eventually a mother can be taught to care for it satisfactorily — then, just as the child is getting to the most important stage of character development, there is another baby to look after. The mother — now fairly proficient in infant care — looks after this baby much better but the toddler is left almost entirely to the care of native servants and by the time the second child comes to the stage of character training, the mother still has no experience for dealing with it.

Seeing this happen all the time, led, three years ago to the Durban Child Health Clinic offering to give instruction in Mothercraft to school girls in order that they might be trained in the upbringing of both babies and young children before they married. This offer appeared to be welcomed by the Education Department but when it came down for arranging the time for this instruction, the most that could be given to it by any school was two sessions of 1½ to 2 hours each to girls taking domestic science. A trained nurse takes 4 months full time work to acquire a working knowledge of Mothercraft, so that in two sessions of 1½ to 2 hours it is difficult to do more than indicate to the girls the underlying principles of Mothercraft and let them know that there are such places as Child Health Clinics.

It is only necessary to pass under review the training of the people who are concerned with health teaching to have one's eyes opened to the fact of why health teaching is as adequate as it is. Health teaching is carried out by people who have very varied training and quite frequently training which is not suited for the purpose.

The main teachers of health at present are :

Doctors. Length of training — at least 5 years. Doctors are well trained to diagnose and treat physical diseases. Those employed in Child Health Centres are not even required to have a Public Health degree. Doctors teach health through Child Health and School clinics.

Psychologists. Length of training — 5-7 years. Like doctors they are well trained to diagnose and treat mental variations. Psychologists teach through Child Guidance clinics. They are really curative rather than preventive institutions which should not be necessary if mothers had a proper grounding in health education and through Nursery Schools.

Health Visitors. Length of training — Certificates of general nursing 3-4 years, midwifery 6-12 months, health visiting 6-12 months, mothercraft 4 months. Health visitors work through Child Health centres; they are well versed in nursing sick people and are qualified to instruct mothers in the health of the child from conception to 2 years.

Nursery School Teachers. Length of training — 3 years. Such teachers are qualified to deal with the health of the child from 2-6 years but could not give instruction in infant dietetics just as health visitors are not trained to give health instruction on the child from 2-6 years — therefore although working along the same lines, they are not interchangeable as teachers.

Domestic Science Teachers. Length of training — 3 years. They are qualified to teach dietetics and household management which neither health health visitors nor nursery school teachers are qualified to teach.

Physical Culturists. Length of training — 3 years. They are qualified to train the muscular system of the body. Their work, under present conditions, is more remedial than curative.

Social Service Workers. Length of training — 3 years. Amongst other things they teach mothers and father how to adjust family life and to adjust themselves to the community. Like many of the other subjects the teaching is given at the wrong time. Social service workers talk of rehabilitating families as if it were preventive work — but in real preventive work the prefix "re" could not appear.

These instances of diverse training of present-day health teachers show why the present method (or want of method) is both costly and unsatisfactory for in no case has the teacher the complete background of positive health necessary for teaching the subject; it also shows that the basis of most of the training for health teachers is in the curing of the diseased conditions which should never have occurred.

For the teaching of health it should be possible to have as teachers who are themselves trained in all branches of health — which automatically includes the prevention of disease.

Up to date there has been no plan and no sequence of health teaching. It has been suggested that in conjunction with the work done at Child Health clinics, boys and girls should be taught Health in the adolescent period of growth. This certainly would be a help but it is not

sufficient for such a many sided subject. Health teaching should be given during all the periods of growth from conception to the end of adolescence — in a form suitable to the particular growth period.

As schools are social agencies deliberately planned and used to educate, it would seem that they are the places where the underlying principles of physical and mental health should be taught for the purpose of turning out men and women of clear vision and noble purpose.

Some of the most important health subjects are biology, anatomy, physiology, dietetics, physical and mental culture and hygiene. The teaching of health should be a school subject from the age of two years — the subject should be adapted with the curriculum to the needs of the children at different stages of development just as other subjects are adapted. There is no use in allowing a child to lose most of its teeth, to acquire all sorts of wrong likes and dislikes to food, to get into wrong habits of all sorts and then expect to do any good by giving a course of health education to adolescents.

Madam Montessori, whose knowledge of the child mind is deep, has said that there is a time for teaching everything. She has said that certain subjects which are assimilated with difficulty by a University student of twenty or more, are taken in with great ease and adopted as a matter of course by children of three or four years.

Everybody knows that quite young children acquire the speaking of foreign languages with correct accent readily; at a later date they can be taught the grammar and fine points of these languages in the same way as they have to be taught the grammar of their own language. In a similar manner so can quite young children acquire good habits of eating, sleeping, physical and mental hygiene etc., which are the basis of good health and reasonable behaviour and can then be taught at a later date the detailed reasons for these habits, such as the chemistry of food, the reasons underlying the importance of sunshine, rest etc.

To ensure a sound mental and emotional development during the formative years of the growth period of a child is equally as imperative as to ensure a foundation of physical health and is just as simple to those who know how. We should ALL know how to do this, not just the select few.

The present day small child is frequently a comparatively unpleasant child and it is not to be wondered at that so many people fail to find accommodation when they say they have young children. The present day child is naughty, destructive and does little of what he is asked to do. The large majority of present day small children exhibit bad teeth and bad posture.

The reason for the former would seem to be that a number of mothers have read books on child psychology and misinterpreted them. With their own lack of background or foundation of health knowledge this is only what is to be expected. They read that a child must have freedom to express himself and interpret this that a child must be left alone to do exactly what he likes and not be checked. But this is not what is meant. Just as a child does not know what food he ought to eat, neither does he know what habits he ought to acquire. A child cannot be left entirely alone to do what he wants — he must be guided so as to like what he ought to do. No child is happy who has not learned to obey and in the acquisition of this experience, neither punishment nor rigid discipline are necessary, only kindly guidance towards the state where free play of intelligence is unrestricted.

Nothing is more interesting than to watch a child developing along the right foundational lines but in order to secure this foundation in children, mothers must have the right foundation themselves. Such a foundation can only be acquired from health education at school.

The knowledge of how to secure health has gone forward by leaps and bounds during this century especially in such subjects as dietetics, hygiene, physical culture and psychology. The problem to be faced is our faulty and inadequate teaching of the existing knowledge.

It is said that no reform, however desirable, can come about without the consent of the people. If this is so then the only way to reform the health of the nation is to have people who are sufficiently well educated in health matters to know what reforms are necessary and advisable. To this end there would be no harm in taking into account the beforementioned observation of such an accredited educationalist as Madam Montessori that there are certain optimum ages for certain subjects and finding out which are the optimum ages for the teaching of certain matters pertaining to health in order to allocate to every pupil the form of health education most advantageous to him, and through him, to the community.

We have certainly proved in Child Health Centres that adult life is not the optimum time for teaching mothercraft, housecraft or dietetics.

My own view is that if health teaching is to be satisfactory, it must begin at conception and be carried out through all the growth periods to the end of adolescence. By regular feeding and judicious management, a mother lays the foundation of health in her baby and should be able to continue to do this up to 8 months to two years of age.

If Madam Montessori's observation is correct that there are certain optimum ages for certain subjects, then the younger the child becomes a member of a class of children of its own age, the better. It is gratifying to see that in South Africa the need for Nursery School teachers has been established — this is the beginning of a reformation in teaching — but unless this reform is part of a consistent whole the addition of Nursery Schools will be as useless in the spurt towards the goal of national health and as expensive an experiment as Child Health clinics have been. I do not mean by this statement that Child Health clinics are entirely useless — I mean that they are too limited to do any lasting good, they are handicapped because they are isolated centres for health teaching whereas they should be part of a complete system of health education just as Nursery Schools should be.

At the present time a small child is taught practical hygiene in a Nursery School. He has his own little basin to wash his hands in and his own towel. It must be very confusing for such a child to go to a school where he uses the same towel as about forty other children and in many other ways unlearn the hygiene he has been taught.

Up to adolescence health teaching should be mainly practical — it should be taught as healthy living.

Biology can be taught to quite young children by allowing to keep, guiding them in the care, and instructing them in the habits of animals.

From twelve to thirteen years onwards, health teaching can be theoretical as well as practical. This is the age when boys take most interest in the construction of mechanical appliances — radios, cars, etc.; it would seem therefore to be an appropriate time to teach the structure of the most finely adjusted mechanism, viz. the human body. The teaching of anatomy and physiology can dispel all the mysteries of sex and if a child has been properly brought up to regard all the functions of the body as natural and ordinary, there will be few mysteries to dispel.

The subject of physiology leads on in a natural sequence to that of dietetics. At this stage of development elementary chemistry is frequently taught. Dietetics can profitably be combined with this subject.

School meals should be part of any health educational programme and should be made by the pupils — they should not be merely food for hungry school children but actual lessons for them. Faddiness about food which readily develops at home, can be discouraged reasonably easily. It is one of the reactions which most frequently lead to neuroses. If school meals are as attractive and varied as is practicable, they serve as useful lessons.

As about 95% of girls marry, it is obviously necessary that they must learn dietetics if they are later on to provide for a household the balanced meals which are the foundation of physical health, whether they are going to make such meals themselves or merely order them, for native servants are ignorant of dietetic requirements.

For boys a knowledge of dietetics is equally important in order that they avoid the commercial mistakes which have been made in the past through lack of health knowledge such as the denaturing of food for monetary gain.

Psychology cannot be left out of the curriculum of either boy or girl. The aim of this teaching is to facilitate the adjustment of children to a planned society. To ensure a sound mental and emotional as well as physical development in the early formative years of a child is most imperative.

By instilling good habits in small children, by developing the spirit of co-operation and relying less on individual academic progress, little difficulty will be experienced in teaching the reasons for certain psychological conclusions.

As well as having an understanding of the mechanism and chemistry of the human body, adolescents should be helped to develop socially adequate codes of conduct; they should be helped to understand how others think and feel and to get on with other people; they should acquire respect for individuality rather than a desire for uniformity; they should experience personal assurance through feeling that they are normal individuals.

Fostering a spirit of independence helps to free adolescents from too close parental ties. Adolescents must be given assurance that they will be able to fill a worthy part in economic society of which they should have full knowledge and in many other ways be taught practical psychology.

In addition to the above all adolescent girls should have a course of mothercraft but with the consistent grounding in health matters they will have had all through early life, this would come easily to them. In the teaching of infant feeding and care, Child Health Centres could be made practical use of and in a similar manner in the teaching of the care of small children, so could Nursery Schools be made use of. Practical work for short periods in such institutions where the adolescent girl could actually make artificial feeds for babies and make meals for older children, would be invaluable.

A fact which must be emphasised throughout every phase of the growth period is that HEALTH is a positive quality of life to be sought after and attained and that it is not a mere avoidance of disease. It can never be stressed too strongly or too often that health is a quality more valuable than any gem that can be named and that if it is once lost, no amount of this world's goods can ever buy it back.

There is no need to live below our capacity as so many of us are doing to-day. When organic beings fail to obtain the nourishment necessary for the perfect functioning of their particular species, they automatically undergo a change — they take on a lower phase of activity than is normal to them. Those of us who allow this to happen fail to react to the stresses and strains of life and have insufficient energy to tackle reforms; we continually suffer sickness and are content to fade out before our allotted span of life.

We should not continue to let tradition take the place of intelligence. Intelligence tells us not only that individual health can be secured through a suitable system of health education, but that National Health can be purchased. A nation can have as much health as it is willing to pay for but whether any nations will expend on construction the sums they have been willing to spend on destruction depends on what use is made of this intelligence we have all been endowed with.

In this report I have made no recommendations but in conclusion I urge most strongly the bringing about of discussions between health and educational experts with the object of revolutionising the present piecemeal, unsystematic, unmethodical health education which can only encourage the upkeep of expensive remedial institutions — an everlasting drain and shame upon any state.

A reasonable preliminary step towards instituting this much needed reform would be the discussion of a sound uniform basis of education for all health teachers.

No. of cases :

	E.	C.	N.	A.
Referred to Doctors	209	2	—	1
" " Hospital	79	37	184	82
" " District Nurses	14	—	3	—
" " Societies	16	10	1	4
Passed for Day Nursery	46	25	7	—

Phyysical Culure :
(Until 15th May.)

No. of postures assessed	253
No. attending classes	472
Total attendance	882

	EUROPEAN CLINICS			NON-EUROPEAN CLINICS				Grand Total
	Gale Street Mobile Clinics Caravan and Vans	Total		Brook Street and Gale Street Centres and Mobile Clinics (Vans)	C.	N.	A.	
Total sessions for children	212	473	685	94	219	250	563	1,248
Total number of ante-natal sessions	37	—	37	7	—	119	126	163
Total attendance at clinics	14,208	19,221	33,429	4,087	11,775	12,501	28,363	61,792
New cases out of above number	1,298	1,297	2,595	511	1,754	3,782	6,047	8,642
Number of infants under one year attending clinic	693	791	1,484	295	929	1,042	2,266	3,750
Total attendance of infants	6,502	8,197	14,699	1,748	4,864	4,015	10,627	25,325
Number of toddlers and pre-school children attending clinic	732	844	1,576	238	410	487	1,135	2,711
Number of nursing mothers attending clinic	586	655	1,241	229	856	1,022	2,107	3,348
Number of expecttant mother attending clinic	100	—	100	19	—	1,419	1,438	1,538
Total attendance of expectant mothers	193	—	193	39	—	2,245	2,284	2,477
Number of clinic mothers attending for advice on family spacing	33	—	33	8	—	—	8	41
Number of tests feeds given	431	307	738	67	86	130	283	1,021
Number of mothers instructed in treatment of minor ailments	998	1,159	2,157	278	2,216	1,423	3,917	6,074
Number of health talks and demonstrations given	1,729	4,114	5,843	621	1,903	1,318	3,842	9,685

EXAMINATION OF ENTRANTS TO SERVICE.

240 Female entrants to the Municipal Service were medically examined.

FOOD DISTRIBUTED.

FOOD DISTRIBUTED.

	Gale Street and Mobile Clinics (Caravan and Vans)	Brook Street and Gale Street Centres and Mobile Clinics (Vans)		
	E.	C.	N.	A.
Number of cases receiving dried milk free	28	25	15	28
Amount of dried milk given free in lbs.	625	785	227	602
Number of cases receiving dried milk at cost and reduced prices	2	34	11	27
Amount of dried milk sold at cost and reduced prices in lbs.	4	451	96	393
Number of cases receiving cow's milk free	81	13	—	3
Amount of cow's milk given free in pints	20,276	2,442	—	505
Number of cases receiving condensed milk free	—	—	—	3
Amount of condensed milk given free in tins	—	—	—	15

BIRTHS.

Notifications :	E.	C.	N.	A.	Total
DURBAN	1,479	217	888	1,079	3,663
GREENWOOD PARK	170	16	98	386	670
SYDENHAM	69	82	184	665	1,000
MAYVILLE	53	37	509	756	1,355
UMHLATUZANA	152	9	58	127	346
SOUTH COAST JUNCTION	145	52	232	627	1,056
	2,068	413	1,969	3,640	8,090
IMPORTED	334	27	1,581	219	2,161
TOTAL:	2,402	440	3,550	3,859	10,251

Registrations :	E.	C.	N.	A.	Total
DURBAN	1,527	216	441	1,072	3,256
GREENWOOD PARK	171	16	68	381	636
SYDENHAM	36	60	144	746	986
MAYVILLE	21	45	471	732	1,269
UMHLATUZANA	143	19	58	479	699
SOUTH COAST JUNCTION	123	43	178	661	1,005
	2,021	399	1,360	4,071	7,851
IMPORTED	332	51	1,982	304	2,669
TOTAL:	2,353	450	3,342	4,375	10,520

Table showing Illegitimate Births occurring among residents in Durban during the year :

	E.	C.	N.	A.	Total
DURBAN	67	66	263	9	405
GREENWOOD PARK	1	3	35	5	44
SYDENHAM	4	18	74	14	110
MAYVILLE	1	12	236	11	260
UMHLATUZANA	5	9	18	9	41
SOUTH COAST JUNCTION	3	13	67	9	92
	81	121	693	57	952
IMPORTED	11	7	836	2	856
TOTAL:	92	128	1,529	59	1,808

Stillbirths — Notifications :	E.	C.	N.	A.	Total
DURBAN	42	6	54	42	144
GREENWOOD PARK	4	—	14	22	40
SYDENHAM	3	5	17	27	52
MAYVILLE	4	3	32	18	57
UMHLATUZANA	3	1	5	7	16
SOUTH COAST JUNCTION	5	5	17	37	64
	61	20	139	153	373
IMPORTED	6	2	148	20	176
TOTAL:	67	22	287	173	549

Stillbirths — Registrations :

	E.	C.	N.	A.	Total
DURBAN	49	9	70	57	185
GREENWOOD PARK	4	—	16	34	54
SYDENHAM	4	5	16	40	65
MAYVILLE	3	4	75	42	124
UMHLATUZANA	3	—	12	17	32
SOUTH COAST JUNCTION	7	3	21	48	79
IMPORTED	70	21	210	238	539
	5	3	182	17	207
TOTAL:	75	24	392	255	746

Stillbirth Rate or number of stillbirths per 1,000 live and stillbirths.

	No. of Stillbirths.	No. of Live Births.	Total.	Stillbirth Rate.
EUROPEANS	70	2,021	2,091	33.47
COLOURED	21	399	420	50.0
NATIVES	210	1,860	1,570	133.75
ASIATICS	238	4,071	4,309	55.23

INFANTILE DEATHS.

	E.	C.	N.	A.	Total
DURBAN	63	19	152	82	316
GREENWOOD PARK	5	2	33	40	80
SYDENHAM	5	7	53	88	153
MAYVILLE	—	9	309	83	401
UMHLATUZANA	5	2	27	19	53
SOUTH COAST JUNCTION	11	7	84	90	192
IMPORTED	89	46	658	402	1,195
	15	—	301	31	347
TOTAL:	104	46	959	433	1,542

NOTE : Of the above infants who died, four were found to be evacuees.

Infantile Mortality Rate or number of infant deaths per 1,00 births.

	Number of Deaths			Number of Live Births			Mortality Rate.
	Male	Female	Total	Male	Female	Total	
EUROPEAN	55	34	89	1,038	983	2,021	44.03
COLOURED	29	17	46	209	190	399	115.28
NATIVE	358	300	658	712	648	1,360	483.82
ASIATIC	222	180	402	2,066	2,005	4,071	98.74

Number of infants who died, who had previously attended clinic or had been visited by a health visitor :

				E.	C.	N.	A.
				10	6	21	11
Attended only.				Health Visited only.			
E.	C.	N.	A.	E.	C.	N.	A.
1	—	14	9	6	1	—	—
				Health Visited and Attended.			
E.	C.	N.	A.	E.	C.	N.	A.
				3	5	7	2

MATERNAL MORTALITY.

Maternal Mortality or number of maternal deaths per 1,000 births.

	Number of Deaths from Causes due to Childbirth			Number of Births			Death Rate on Live Births	Death Rate on Live and Stillbirths
	Live	Still	Total	Live	Still	Total		
Europeans	7	2,021	70	2,091	3.46	3.34		
Coloureds	—	399	21	420	—	—		
Natives	19	1,360	210	1,570	13.97	12.1		
Asiatics	13	4,071	238	4,309	3.19	3.01		

Maternal Deaths attended by :

	E.	C.	N.	A.	Total.
Doctor	—	—	1	1	2
Born at home—removed to hospital:—					
(a) No midwife	—	—	4	—	4
(b) Midwife in attendance	—	—	—	3	3
No midwife or doctor	—	—	1	—	1
Hospital or nursing home	6	—	12	9	27
No particulars	1	—	1	—	8
TOTAL:	7	—	19	13	39

Causes of Maternal Deaths :	E.	C.	N.	A.	Total.
Puerperal Sepsis and Peritonitis	—	—	4	7	11
Toxaemia of Pregnancy	—	—	3	—	3
Eclampsia	1	—	4	4	9
Haemorrhage — Ruptured Ectopic	1	—	—	—	1
Obstructed Labour — Cardiac Failure	—	—	1	1	2
Lobar Pneumonia	—	—	2	—	2
Nephritis	1	—	1	1	3
Pyelitis of Pregnancy	1	—	—	—	1
Acute Yellow Atrophy of Liver	—	—	1	—	1
Ileus following Caesarian Section	2	—	—	—	2
Volvulus of Intestine	1	—	—	—	1
Amoebic Dysentery	—	—	3	—	3
TOTAL :	7	—	19	13	39

HEALTH VISITORS WORK.

Infants under 1 year :	E.	C.	N.	A.	Total.
First visits — Feeding { Breast	939	347	2,157	2,163	3,606
Mixed	123	7	86	120	336
Artificial	186	28	45	73	332
TOTAL :	1,248	382	2,288	2,356	6,274

Re-visits — Feeding	E.	C.	N.	A.	Total.
{ Breast	1,558	96	431	711	2,796
Mixed	1,054	175	691	973	2,893
Artificial	1,860	255	109	438	2,632
TOTAL :	4,472	496	1,231	2,122	8,321

Older Children :	E.	C.	N.	A.	Total.
First visits	433	100	270	2,797	3,600
Re-visits	7,642	1,298	1,375	3,413	13,728
TOTAL :	8,075	1,398	1,645	6,210	17,328

Other visits :	E.	C.	N.	A.	Total.
Infant deaths	53	29	99	133	314
Pemphigus Neonatorum	2	—	—	—	2
Other Infectious Diseases or Contacts	16	—	—	—	16
Inspection of Lavatories	4	—	—	—	4
Reports to Sanitary Office	11	1	1	4	17
Other work	—	—	134	—	134
TOTAL :	86	30	234	137	487

TOTAL VISITS.

First Visits — Infants	6,274
Re-visits — Infants	8,321
Older Children	17,328
Other visits	487
TOTAL :	32,410

No. of Infants under 1 year visited	E.	C.	N.	A.	Total
.....	1,720	439	2,395	3,197	7,751
Special Visits.					
No. of visits to Nursery Schools					35
No. of visits to Homes for Protected Children					29
TOTAL :					64

Lectures and Demonstrations.

Demonstrations and talks to Domestic Science students from Natal Technical College	36
Demonstrations and talks to Domestic Science students at Government Schools	20
Demonstrations and talks to students from Durban Girls' College	12
Lectures and demonstrations to Native Medical Aid students	8
Midwifery lectures to Red Cross Detachments	13
Midwifery lectures to C.P.S. wardens	5
TOTAL :	194

CAUSES OF INFANTILE DEATHS.

EUROPEANS:

Cause.	Weeks			Months			Total
	0-1	1-2	2-4	1-3	3-6	6-12	
Premature Birth	19	1	—	—	—	—	20
Congenital Debility	1	—	—	1	—	—	2
Intra-cranial haemorrhage	6	1	—	—	—	—	7
Pre-natal Toxaemia	1	—	—	—	—	—	1
Congenital Atelectasis	2	1	—	—	—	—	3
Icterus Gravis Neonatorum	1	—	—	—	—	—	1
Congenital Malformations	4	2	1	—	—	—	7
Congenital Pyloric Stenosis	1	—	—	1	1	—	3
Gastro Enteritis	1	—	—	2	6	6	15
Dysentery (unspecified)	—	1	—	—	—	—	1
Amoebic Dysentery	—	—	—	—	—	1	1
Bacillary Dysentery	—	1	—	—	—	—	1
Gastric Influenza	—	—	—	—	—	1	1
Malnutrition	—	—	—	1	—	1	2
Bronchitis	—	1	—	—	—	—	1
Broncho Pneumonia	1	—	1	—	2	4	8
Influenzal Congestion	—	—	—	—	—	1	1
Whooping Cough	—	—	—	—	1	—	1
Meningitis	—	—	—	—	1	2	3
Diphtheria	—	—	—	—	1	—	1
Infantile Convulsions	—	—	—	—	—	1	1
Primary Purpura	1	—	—	—	—	—	1
Septicaemia	—	—	—	—	1	—	1
Dermatitis	—	—	—	—	—	1	1
Accidental Death	—	—	3	—	—	—	3
Infanticide	—	—	—	—	1	—	1
Natural Causes	—	—	—	—	1	—	1
TOTAL :	38	8	5	5	15	18	89

COLOURED:

Premature Birth	13	2	—	—	—	—	15
Congenital Debility	1	—	2	—	—	—	3
Intra-cranial haemorrhage	1	—	—	—	—	—	1
Icterus Gravis Neonatorum	—	—	—	1	—	—	1
Malaena Neonatorum	1	—	—	—	—	—	1
Gastro Enteritis	—	—	—	1	4	7	12
Dysentery (unspecified)	1	—	—	—	—	—	1
Influenza	—	—	—	—	—	1	1
Broncho Pneumonia	—	—	—	—	1	4	5
Lobar Pneumonia	—	—	—	—	—	1	1
Whooping Cough	—	—	—	—	1	—	1
Meningococcal Meningitis	—	—	—	—	1	—	1
Acute Nephritis	—	—	—	1	—	—	1
Congenital Syphilis	1	—	—	—	—	—	1
Accidental Death	—	—	—	1	—	—	1
TOTAL :	18	2	2	4	7	13	46

NATIVES:

Premature Birth	58	8	9	7	—	—	82
Congenital Debility	24	18	9	3	1	—	55
Unbilical Haemorrhage	4	1	1	—	—	—	6
Injury at Birth	8	2	—	—	1	—	11
Malaena Neonatorum	7	7	1	1	—	—	16
Congenital Malformations	—	1	—	—	—	—	1
Atelectasis	8	3	—	1	—	—	12
Pyloric Stenosis	—	—	—	—	—	1	1
Tetanus Neonatorum	5	5	—	—	—	—	10
Gastro Enteritis	6	14	22	57	43	113	255
Bacillary Dysentery	—	—	—	—	—	2	2
Amoebic Dysentery	—	—	—	1	1	1	3
Typhoid Fever	—	—	—	—	1	—	1
Nutritional Oedema	—	—	—	—	—	5	5
Malnutrition	—	—	1	1	2	2	6
Pellagra	—	—	—	1	—	—	1
Bronchitis	—	—	1	5	8	16	30
Broncho Pneumonia	8	15	12	9	19	37	100
Lobar Pneumonia	1	—	1	4	—	2	8
Congestion of Lungs	1	2	—	—	1	1	5
Pulmonary Tuberculosis	—	—	—	—	1	1	2
Tuberculosis Meningitis	—	—	—	—	1	—	1
Miliary Tuberculosis	—	—	—	—	—	2	2
Tuberculosis of Lymphatic System	—	—	—	—	—	1	1
Diseases of the Thymus	—	—	—	—	1	—	1
Otitis Media	—	—	—	—	1	—	1
Cellulitis	1	1	—	—	1	1	4
Heart Failure	—	—	—	1	—	—	1
Septicaemia	—	—	—	—	—	1	1
Infantile Convulsions	1	1	1	—	1	—	4
Congenital Syphilis	3	3	5	9	5	3	28
Other Diseases of Liver	—	—	—	—	1	—	1
Natural Causes	1	—	—	—	—	—	1
TOTAL :	136	81	63	100	89	189	658

ASIATICS:

Cause.	Weeks			Months			Total
	0-1	1-2	2-4	1-3	3-6	6-12	
Premature Birth	35	6	6	2	—	—	49
Congenital Debility	25	12	5	9	—	—	51
Injury at Birth	9	—	—	—	—	—	9
Atelectasis	4	—	—	1	—	—	5
Malaena Neonatorum	1	—	—	—	—	—	1
Congenital Malformations	4	—	1	—	—	—	5
Gastro Enteritis	2	4	10	17	26	32	91
Bacillary Dysentery	—	—	—	—	—	3	3
Malnutrition	—	2	—	3	2	4	11
Nutritional Oedema	—	—	—	2	—	2	4
Intestinal Obstruction	—	1	—	—	—	1	2
Bronchitis	—	4	7	7	7	8	33
Broncho Pneumonia	2	2	7	14	20	38	83
Lobar Pneumonia	—	—	1	2	3	1	7
Coryza	8	3	4	1	—	—	16
Pleurisy (type unspecified)	1	—	—	—	—	—	1
Pulmonary Tuberculosis	—	—	—	—	—	1	1
Influenza	—	—	—	—	1	—	1
Whooping Cough	—	—	—	—	2	—	2
Endocarditis	—	—	—	—	1	—	1
Myocarditis	—	—	—	—	1	—	1
Epilepsy	1	—	—	—	—	—	1
	—	—	—	1	—	2	3
Congenital Syphilis	—	—	1	4	—	—	5
Septicaemia	—	—	1	—	—	—	1
Mastoid Abscess	—	—	—	—	—	1	1
Convulsions	—	2	—	—	—	—	2
Accidental Burns	—	—	—	—	—	1	1
Natural Causes	6	—	2	—	—	1	9
	98	36	45	63	63	97	402

FEEDING OF INFANTS WHO DIED FROM:—

Enteritis.	E.	C.	N.	A.	Total
Breast Fed	—	3	15	10	28
Breast Fed with cow's milk	1	—	—	1	2
Breast Fed with sweetened condensed milk	—	—	4	3	7
Breast Fed with cereal	—	1	3	2	6
Breast Fed with Mixed feeding	—	—	1	—	1
Cow's milk	2	1	3	4	10
Cow's milk and cereal	1	—	3	3	7
Dried milk	2	1	4	3	10
Dried milk and extras	—	—	1	—	1
Sweetened condensed milk	1	1	4	8	14
Sweetened condensed milk and mixed feeding	—	—	2	5	7
Unable to trace	8	5	215	51	279
TOTAL :	15	12	255	91	373

Malnutrition and Nutritional Oedema.	E.	C.	N.	A.	Total
Breast Fed	—	—	2	2	4
Dried Milk	1	—	—	1	2
Sweetened condensed milk and cereal	—	—	1	1	2
Unable to trace	1	—	8	10	19
TOTAL :	2	—	11	14	27

SUPERVISION OF MIDWIVES.

	E.	C.	N.	A.	Total
No. of trained midwives practising in Durban	27	3	—	—	30
No. of trained midwives who have resigned from the List of Practising Midwives	5	—	—	—	5
No. of trained midwives deceased	—	—	—	—	—
No. of trained midwives who cannot be traced	1	—	—	—	1
No. of untrained midwives added to the List	4	—	—	—	4
No. of untrained midwives practising in Durban	11	3	1	171	186
No. of untrained midwives who have resigned from the List of Practising Midwives	1	—	—	—	1
No. of untrained midwives who have ceased to practise or who cannot be traced	1	—	—	—	1
No. of untrained midwives deceased	—	1	—	—	1
No. of untrained midwives suspended from practising midwifery pending verdict on a maternal death	—	1	—	—	1
No. of women practising midwifery who have been warned not to practise unless they apply to be put on the List	11	—	4	9	24

Inspection of Bags, Equipment, Registers, Charts, etc., at the Child Health Centres.

	E.	C.	N.	A.	Total
No. of inspections of trained midwives' equipment	90	12	1	—	103
No. of inspections of untrained midwives' equipment	46	7	9	1,217	1,279

Visits.

No. of visits paid to midwives in their homes	70	21	3	101	195
No. of confinements attended by untrained midwives, supervised	—	—	—	5	5
No. of false alarms	—	—	—	5	5
No. of visits to ante-natal cases	244	188	52	4	488
No. of visits to post-natal cases	64	34	3	29	130
No. of cases of Maternal Death visited	6	—	25	13	44
No. of cases of Puerperal Sepsis visited	—	—	19	5	24
No. of cases of Ophthalmia Neonatorum visited	7	5	55	13	80
No. of cases of Venereal Disease visited	—	—	—	50	50
No. of cases of Stillbirth visited	49	5	144	163	361
No. of other visits	196	65	—	—	261
No. of talks given at ante-natal sessions	—	—	—	92	92

Tuition.

	E.	C.	N.	A.	Total
No. of lectures and demonstrations given to untrained midwives	—	39	—	39	78
No. of times maternity film shown to midwives	—	—	—	—	—
No. of untrained midwives attending classes	—	1	—	15	16
No. of untrained midwives examined	—	1	—	15	16
No. of untrained midwives passed examination	—	1	—	15	16
No. of midwives' bags sterilized at Child Health Centres after attending septic cases	1	—	—	1	2
No. of midwives' dressings sterilized at Child Health Centres	2	2	—	13	17
No. of midwives' new bags equipped at Child Health Centres	—	1	—	15	16

Trained practising midwives, registers are examined every three months and their appliances every six months.

Untrained practising European and Coloured midwives' registers and appliances are examined every three months.

Untrained practising Indian midwives' appliances are examined every month.

Maternity bags are equipped and sold to untrained midwives who have attended the full course of lectures and demonstrations and passed the examination set by the Child Health Section at 12/6d. each (less than cost price).

Takings for maternity bags during the year amounted to £11 12s. 6d.

ANTE NATAL WORK.

	E.	C.	N.	A.	Total
No. of expectant mothers attending clinic	100	19	—	1,419	1,538
Total number of attendances	193	39	—	2,245	2,477
No. of ante-natal clinics	37	7	—	119	163

SUPERVISION OF NURSING HOMES.

	E.	C.	N.	A.	Total
No. of Nursing Homes inspected	11	—	1	1	13
No. of times Nursing Homes inspected	146	—	9	7	162

K. McNEIL,

Medical Officer in Charge,
Child Health Section,
Public Health Department.

13. PROSECUTIONS.

	Cases.	Con- victions.	Dis- missals.	Fines.
Section 1 Sub-sect. (m)	1	1	—	£2 0s. 0d.
Section 1 Sub-sects. (d) and (e) Public Health By-laws	1	1	—	£1 0s. 0d.
Section 1 (j) Public Health By-laws (yard drainage)	1	1	—	£2 0s. 0d.
Foodstuffs below standard	1	1	—	£3 0s. 0d.

14. OTHER MATTERS OF HEALTH AND SANITATION.

Inspections by District Inspectors.

Hotels, boarding houses and lodging houses	.....	1,958
Restaurants, tearooms and eating houses ..	.....	2,623
Bakeries	.....	98
Butcheries	.....	1,752
Dairies and Milk Depots.	.....	1,245
Laundries	.....	463
Markets	.....	183
Offensive Trades	.....	153
General	.....	22,793
Night Inspections	.....	2
		<u>31,270</u>

SAMPLES OF FOODSTUFFS TAKEN

(Food, Drugs and Disinfectants Act No. 13 of 1929).

1st JULY, 1941 to 30th JUNE, 1942.

Article.	Number of Samples Taken.	No. of Samples Genuine.	No. of Samples Defective.	Action taken.
Milk	148	141	7	Interviewed and warned
Sausages	24	24	—	—
Mincemeat	12	12	—	—
Polony	1	1	—	—
Cooking Oil	1	1	—	—
Ice Cream	8	8	—	—
Lard	3	3	—	—
Dripping	3	3	—	—
Cream	6	6	—	—
Curry Powder	9	9	—	—
Dried fruit (raisins)	1	1	—	—
Dried fruit (other)	2	2	—	—
Sweets	5	5	—	—
Purene	1	1	—	—
Butter	2	2	—	—
Fresh milk cheese	3	—	3	Warned and fined £3.
Honey	1	1	—	—
Peaches	1	1	—	—
Apples	1	1	—	—
Tomato Sauce	1	1	—	—
Rice	4	4	—	—
Lentils	2	2	—	—
Cream of tartar	1	1	—	—
Vegetable ghee	1	1	—	—
Cloves	2	2	—	—
Cinnamon	1	1	—	—
Ginger	1	1	—	—
Pepper	1	1	—	—
Milk for T.B. Test	96	94	2	Cows destroyed

Native Administration. The following returns were submitted by the Medical Officer, Native Administration :

No. of Natives examined	88,260
No. of Natives vaccinated	3,559
No. of Natives rejected	1,040

Of the total number of rejections, 787 were on account of Venereal Disease.

Report of the Plans Inspector. (For the year June 30th, 1942).

During the year 1,852 plans were referred — or after amendment — re-submitted to this Department for report. Of this total 1,365 plans were ultimately approved by Council. These plans represent a gross value of £1,412,760. made up as follows :

Dwellings	386 plans	£377,696
Flat blocks	59 „	360,082
Office, factories, stores. Additions and alterations respectively	1,018 „	674,982
	<u>1,363 plans.</u>	<u>£1,412,760</u>

A total of 1,147 inspections were made of premises and/or sites in all parts of Greater Durban in connection with the above plans, in addition to numerous consultations with offices of other departments and architects concerned.

Attention was concentrated mainly on questions of lighting, ventilation, drainage, damp-proofing and pest and vermin control.

In addition to the foregoing, 894 visits were made in connection with inspectional work in the Umhlathuzana and South Coast Junction areas.

15. HEALTH STAFF.

Administration and Inspectional :

1 Medical Officer of Health	Gunn, Dr. G. H., M.D. Ch.B., D.P.H.
1 Asst. Medical Officer of Health (Actg. T.B. Officer).	Hooper, Dr. D. H., M.B., Ch.B., D.P.H.
1 Clinical Medical Officer	Casson, Dr. M., M.R.C.S. (Eng.) L.R.C. (Lond.)
1 Venereologist	Wallace, Dr. G. D. H., M.D., D.P.H., M.R.C.S. L.R.C.P.
1 Veterinary Officer	Harber, A. F. Lt. Col., M.R.C.V.S.
1 Native Medical Officer	Dhlamini, Dr. C. N., L.R.C.P. (Edin.) L.R.F.P.S. (Glas.) L.R.C.S. (Edin.)
1 Indian (female) Medical Officer (part time)	Ismail, Dr. M., M.B., Ch.B.
6 Divisional Officers.	Non-European.
7 District Inspectors.	1 Indian interpreter.
4 Health Visitors.	3 Indian messengers.
3 Clerks.	
3 Junior Clerks.	
5 Typistes.	
1 Switchboard operator.	

City Fever Hospital.

1 Matron	Ewels, Miss E. M.
1 Night Superintendent	Mitchell, Miss M.
1 Senior Sister.	Non-European.
5 Ward Sisters.	1 Indian Sirdar.
7 Staff Nurses.	38 do. Orderlies.
16 Ward Nurses.	1 do. Female Assistant.
1 Housekeeper.	1 do. Messenger.
1 Seamstress.	12 Native (male) Watchmen and Labourers.
1 Typiste.	9 do. (females) Ward Maids.
1 Ward-Maid.	

Child Health.

1 Medical Officer	McNiell, Dr. K. N., M.B., Ch.B., D.P.H.
1 Asst. Medical Officer	Robertson, Dr. W. I., M.B., Ch.B.
1 Clinic Matron.	Non-European.
1 Supervisor of Midwives.	8 Indian female Health Visitors.
1 Assistant of midwives.	2 Native " " "
13 Health Visitors.	2 Native Messengers.
4 Clinic Assistants.	2 Indian Messengers.
2 Clerks.	
1 Typiste.	
1 Switchboard Operator.	

Disinfecting Station and Laundry.

1 Superintendent	Morning, C. D.
3 Disinfectors.	Non-European.
1 Laundryman.	3 Indian Sorters.
2 Drivers.	16 Indian Ironers.
	30 Indian Calendar hands.
	3 Indian Ambulance attendants.
	4 Indian Boiler attendants.
	3 Native Van attendants.

Pest Control.

1 Supervisor	Stewart, R. O., R.S.I.
1 Field Supervisor	Clemenson, J. L. R.S.I.
1 Senior Overseer.	Non-European.
6 Overseers.	2 Indian Sirdars.
11 Patrolmen.	38 Indian Labourers.
1 Assistant Chemist.	8 Native Health Assistants.
	2 Native Indunas.
	21 Native Labourers.

INFECTIOUS DISEASE AND T.B. CONTROL.

Non-European.

3 Indian Health Assistants.
4 Native Health Assistants.

V.D. CONTROL.

Non-European.

1 Indian Health Assistant.
5 Native Health Assistants.
4 Native Dispensers.
2 Native Clerks.
4 Native Female nurses.

PERMANENT STAFF ON ACTIVE SERVICE.

Administration.

1 Deputy Medical Officer of Health	English, Dr G. D., M.D., Ch.B., D.P.H., D.T.M.
1 Acting-Adm. Officer	Boutle, R. E., R.S.I.
1 Chief-Clerk	Tedder, H. M.
3 Clerks.	Non-European.
4 Junior Clerks.	1 Indian Messenger.
5 Div. Officers.	
3 District Inspectors.	
2 Prob. Inspectors.	

City Fever Hospital.

1 Asst. Matron.
3 Ward Sisters.
1 Typiste.

Pest Control.

1 Assistant Supervisor.
4 Overseers.
10 Patrolmen.
1 Indian Sirdar.
1 Labourer.

Child Health.

3.1 Health Visitor.

Laundry and Disinfecting Station.

1 General Assistant.
1 Driver.

REPORT "B."

(1) **Housing.** The demolition of insanitary dwellings was intermitted as far as possible in compliance with Council's relevant resolution of 30th September, 1940. Six unfit dwellings were demolished by owners at the request of the Department. Many minor improvements of an urgency nature were effected by verbal or written notices under Section 30 of the Public Health By-laws and by pressure exercised through the Zonal Regulations under Section 32(1) (b) of the Slums Act.

Under the latter procedure, 351 dwellings were dealt with, of which 139 were found to be in order, 70 were repaired and renovated, 56 await completion of repairs and renovations, 6 were demolished and 80 listed for demolition in due course.

Forty-six prosecutions were initiated for failure to apply for permits under the Regulations. One prosecution was successfully concluded.

(2) **Housing of Natives, Native or Asiatic Locations or Barracks.** The housing of Natives and Indians in barracks continues to be inadequate leading to general overcrowding. All barracks are served by Corporation water-supply and water-borne sewerage, but notwithstanding, sporadic dysentery occurred at the Indian Magazine Barracks. This is to be attributed to the communal system of sanitation, which appears to be definitely unsuitable for family housing. Rather than use the communal closets, small children foul the yards and approaches to the blocks, and fly-vectors complete the chain of infection.

Shack-building continues in the already congested peripheral slum areas — at an amazing rate. Poorly supplied with water and even worse with conservancy, these areas have created a health problem of appalling magnitude. In such an environment the acute intestinal infections find their most suitable medium for propagation, and the mortality rates from Dysentery, Enteritis and Typhoid have, not unexpectedly, doubled in three years.

Housing — co-ordinated with slum clearance — is the ultimate remedy and the following is a statement of the several housing schemes undertaken or about to be undertaken by the Durban City Council, together with schemes provided for under the Council's Eight Year Housing Programme. (Europeans are included for convenience).

(A) The total cost of all schemes undertaken or about to be undertaken is	£1,190,395
(B) The total cost of schemes provided in Eight Year Housing Programme is	5,546,000
Making a total of	<u>£6,736,395</u>

A. Schemes Undertaken or to be Undertaken.

Allocated as follows :

European — Economic	£817,106
do. — Sub-Economic	29,660
Indian — Economic	38,682
do. — Sub-Economic	70,102
Coloured — Economic	8,064
do. — Sub-Economic	57,036
Native — Sub-Economic	169,745
	<u>£1,190,395</u>

Included in the above figures are the following Selling Schemes and Loan Schemes :

EUROPEAN.

Selling Schemes. 486 houses. Selling prices range from £568 to £1,861. Mostly sold on £25 deposit and balance repayable by monthly instalments ranging from £2 15s. 0d. to £10 10s. 0d. over periods not exceeding 29 years. Total Cost £628,619

Loan Schemes. (a) Fully Paid Land Scheme. 43 Loans ranging from £570 to £950. Deposit of 20 per cent. of cost of house and land required, balance repayable by monthly instalments ranging from £3 7s. 0d. to £5 18s. 6d. over a period of 20 years. Total Cost £36,045

(b) Partly Paid Land Scheme. 118 Applications for assistance. Deposit of 5 per cent. of cost of house and land required, balance repayable by monthly instalments ranging from £3 15s. 0d. to £10 8s. 0d. over a period of 20 years. Total Cost £152,442.

INDIAN.

Selling Schemes. 50 houses. Selling prices range from £331 to £660. All to be sold on £25 deposit and balance repayable by monthly instalments ranging from £1 8s. 3d. to £3 0s. 0d. over 29 years. Total Cost £31,273

Loan Schemes. 22 Loans ranging from £280. to £500. Deposit of 20 per cent. of cost of land and house required, balance repayable by monthly instalments ranging from £1 13s. 0d. to £2 18s. 6d. over a period of 20 years. Total Cost £7,409

COLOURED.

Selling Schemes. 10 houses. Selling prices range from £785 to £829. All to be sold on £25 deposit and balance repayable by monthly instalments ranging from £3 12s. 0d. to £3 16s. 6d. over a period of 29 years. Total Cost £8,064

Total cost of selling schemes £667,958.

SUMMARY.

Scheme.	No. of Houses.	Total Cost.
European Selling	486	£628,619
" Fully Paid Land	43	36,045
" Partly " " "	118	152,442
Indian Selling	50	31,273
" Fully Paid	22	7,409
Coloured Selling	10	8,064
	<u>729</u>	<u>£863,852</u>

The remaining schemes are mostly Letting Schemes and their total costs amount to £326,543

Europeans	£29,660
Indians	70,102
Coloured	57,036
Natives	169,745
	<u>£326,543</u>

Total cost of schemes undertaken or about to be undertaken £1,190,395

B. Eight Year Housing Programme. In addition to the above, the Council, with the approval of the Government, has adopted in principle the following Eight Year Housing Programme for the City :

	No. of Economic Houses	No. of Sub- Economic Houses	Economic Cost	Sub- Economic Cost	Total No. Hses.	Total Cost
European.						
Northern Area	1,000		1,050,000		1,000	1,050,000
Unspecified	374	75	383,000	50,000	429	433,000
Point Rd. Flats (existing approved scheme)	flats		150,000		200	150,000
Clayton Rd. Aged Poor (Revote)				1,000		1,000
Indian.						
Merebank — Wentworth —						
Clairwood	2,067	398	1,330,000	206,000	2,465	1,536,000
Cato Manor	50		33,000		50	33,000
Springfield (1st Portion)	60	100	28,000	44,000	160	72,000
do. (Balance)	163	602	104,000	257,000	765	361,000
Cato Manor Municipal Employees (Revote)				6,000		6,000
Cato Manor General (do.)			1,600			1,600
do. old (do.)				1,350		1,350
Unspecified	240	50	160,400	27,650	290	188,050
Coloured.						
Sparks Estate Aged Poor		26		12,000	26	12,000
Sparks Estate	350	50				
Merebank — Wentworth —						
Clairwood	550	100	312,000	44,000	600	365,000
Unspecified	100	25	65,000	15,375	125	80,375
Melbourne Rd. Flats (Revote)				6,000		6,000
Sparks Estate (Revote)				1,250		1,250
Native.						
Women's Hostel, Grey St. (Revote)				600		600
Jacobbs Location (Revote)				1,580		1,580
Merebank Hostel		5,000 beds		329,000	5,000 beds	320,000
Blackhurst Estate		1,268 houses		452,091	1,268 houses	452,091
Somtseu Rd. Hostel		300 beds		15,000	300 beds	15,000
Lamont Location		100 beds		27,900	100 beds	27,900
Unspecified		1,000 beds		45,000	1,000 beds	45,000
do.		556 houses		137,829	556 houses	137,829
	4,904 200 flats	3,250 6,400 beds	2,848,000	1,698,000	8,134 200 flats 6,400 beds	5,546,000

Housing Loans Under Section 6 of Act No. 35/1920.

Details.

Council may advance up to 80% of combined value of land and building.

Maximum loan of £1,050.

Maximum cost of house £1,100.

Present rate of interest 4% per annum.

Paucity of Applications. During the past 20 years (i.e. since the passing of the Housing Act No. 35 of 1920) only 43 loans totalling £36,045 have been advanced. The cause of the paucity in the number of applications appears to have been the severe conditions which attach to the scheme, particularly the heavy initial deposit (20%) required to be found and the low maximum cost of the dwelling (£1,100). In other words on a house and land say £1,200, the applicant has to find a deposit of £240. There are few working men to-day who can afford to deposit a sum of £240 — a life's savings to some.

The Government, despite numerous requests from the local authorities including the Durban City Council, has refused to reduce the amount of this initial required deposit under the Housing Loan Scheme.

Partly Paid Land Housing Scheme Under Section 5 of Act No. 35 of 1920. Council may assist an individual in the erection of a dwelling up to 95% of combined cost of land and building.

Maximum cost of house £1,500.

Maximum cost of land £500.

Maximum assistance £1,600.

Present rate of interest 4% per annum.

Maximum income of applicant £600 per annum, plus £50 per annum for each two children.

Popularity of Scheme. Since the final adoption of the scheme 3 years ago, 118 applications have been received which have either been approved by the Council or are at present under consideration. The total amount required to finance these applications is £152,442.

(3) Remarks and Recommendations and Housing Matters of special importance requiring attention.

Noteworthy features were :

- (i) the development of opposition to the Council's Eight-year Programme of housing, particularly in relation to the Ungeni North and Merebank-Wentworth schemes of land acquisition; and
- (ii) delay — occasioned by the opposition aforesaid — in obtaining Ministerial consent for acquisition or expropriation.

It cannot be too firmly emphasised that the Eight-year Housing Plan is a balanced conception, into which the needs of the population as a whole and sectionally, have been integrated. Any substantial alteration of the Plan — dictated by other than purely technical consideration — must prejudice the effectiveness of the Plan as a rational attempt to co-ordinate re-housing with slum-clearance on the scale requisite to solve Durban's outstanding housing problem.

The basic merit of the Eight-year Housing Plan resides in its adoption of the integrated 'township' unit of housing as against the scattered and largely un-co-ordinated "scheme" style and dimensions of housing which — as elsewhere — has here shown its inability to keep pace with requirements.

Shortage of building labour and processed materials have also acted as deterrents against progress with new housing and as a corollary, the relief of overcrowding and slum clearance.

APPRECIATION. I wish to express my appreciation of the loyal service of each member of the staff of the Department, and my thanks to you, Sir and to the other members of the City Council for courtesy and assistance extended to me throughout the past year.

I have the honour to be,

Ladies and Gentlemen,

Your obedient servant,

G. H. GUNN, M.D., Ch.B., D.P.H.

City Medical Officer of Health.

